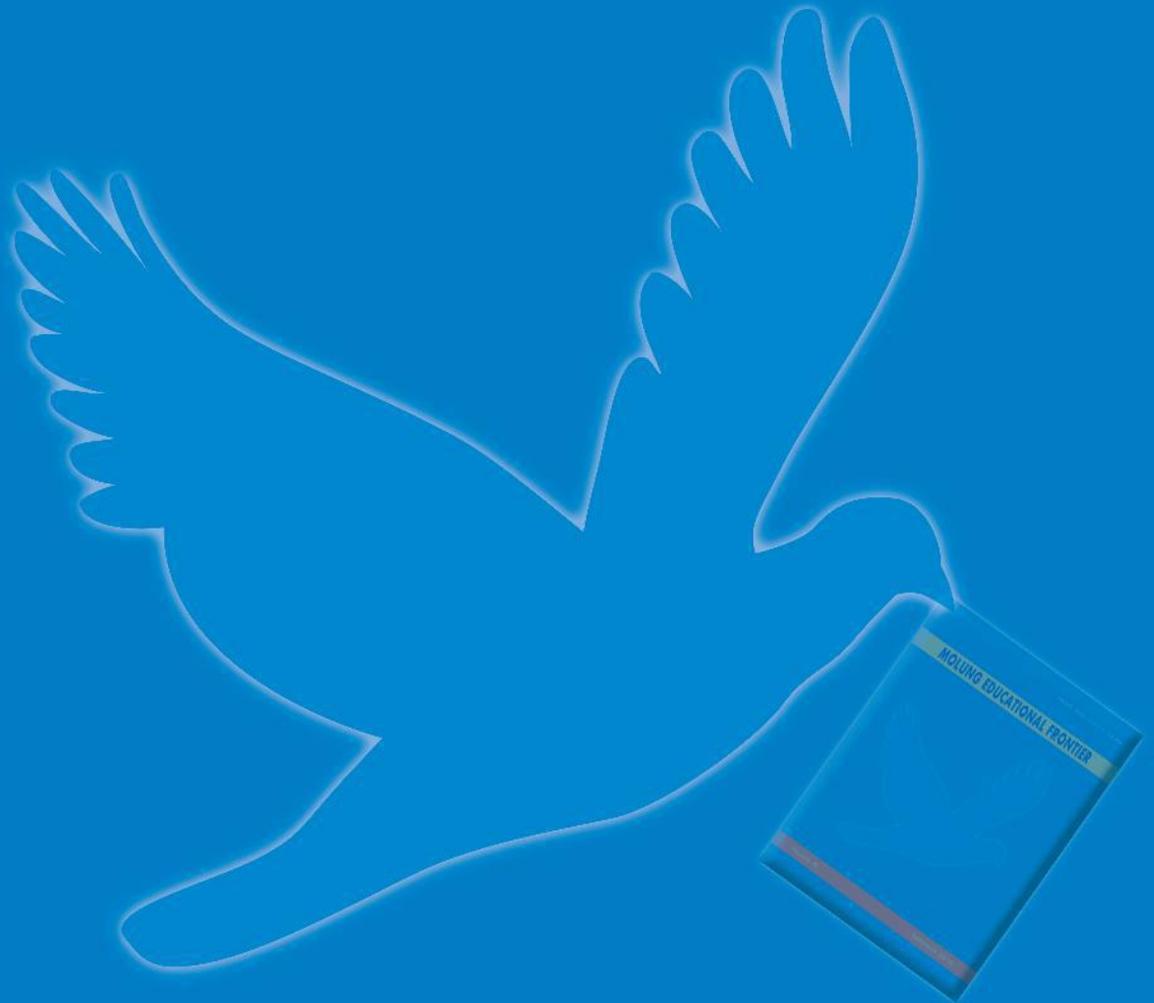


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# MOLUNG EDUCATIONAL FRONTIER



**Volume 10**

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## Editorial

*Molung Educational Frontier* is a scholarly journal that incorporates articles based on research on **governance, development, and prosperity**. This journal is published by Molung Foundation in December every year on annual basis. This year, however, we felt the need of publishing two issues of Volume 10. A special issue of Volume 10 was published in June, which included the articles focused on **language, literature, and culture** as a sort of half yearly publication. Now in December 2020 we are publishing the regular issue of Volume 10, which includes the articles on the usual themes of **governance, development, and prosperity**.

The present volume covers different articles from various disciplines of science and society such as political science, economics, sociology, anthropology, culture, language literature, art, communication, law, education, physics etc., which are inextricably linked to our general theme of **governance, development, and prosperity** in some way. We hope this volume can well contribute to the policy formulation and development processes in government as well as non-government sectors, which in our country has become urgent in the present context.

This volume has come out with the enormous effort of a number of researchers and the peer reviewers. We have done a number of things to make it a peer reviewed journal. We announced a call for papers with the detailed timetable mentioning the date of initial submission, review process, final submission of the papers with revision, and editing by the Editorial Board. Then we have checked plagiarism and grammar of all the manuscripts submitted by the writers with software. The paper writers have followed the author guidelines, the reviewers have followed the reviewer guidelines, and Editorial Board has maintained the record of the whole process. This journal is thus a peer reviewed journal published as per the provisions of its system.

The Editorial Board is thankful to the leadership of the Foundation which has provided the space and logistics for the publication of this volume as before. We would also like to thank our article contributors who did their best effort to produce good quality articles. We expect them to continue with their research activities in the future and support us in whatever ways they can.

December 22, 2020  
Kathmandu, Nepal

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# Non-Aligned Movement: Challenges and Way Forward

Aswasthama Bhakta Kharel, PhD\*

## Abstract

*Non-Aligned Movement commonly known as NAM has played a useful role in the common cause of World peace and prosperity. It has succeeded in steadily emerging as a central international forum. The newly independent nations of the world that have come into the one fold of this Movement have determined their own and resist the coercion of the World powers and their attempt to exploit them. During the cold war and in the present context, the Non-Aligned Movement examines its objectives and achievements in both periods. The main goals of NAM during block policy of more extraordinary powers, the structure of bipolar in international relations, the constant support and through its conferences and in the United Nations for World peaceful environment, détente, and disarmament, and prevention of the world into the block division (East and West). Despite these changes, several others new challenge that are arising, and its member states for the achievement of peace and security for humankind.*

**Keywords:** international forum, globalization, disarmament, cold war, third world movement

## An Overview

The founding principle of a NAM was anti-colonialism and anti-imperialism, which appealed to many countries in the world that had neither recently been liberated or were still waging national Liberation Movements to liberate from colonialism and imperialism. The NAM thus became the standard platform for them to put forward their common agendas. Since World War II, there have been increased efforts to examine international relations within a global perspective. These efforts have resulted in several studies on regional and international organizations. Few studies, however, have attempted to examine transnational groupings, especially those seeking to transform the world politics and economics. The Non-Aligned Movement is the most significant international Movement emerging in contemporary history (Munro, 2020). For both the

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political and philosophical reasons, the Movement was ignored by the western tradition. It is to assume its rightful place as an essential international social Movement. It is imperative in the scholarly practice with the Non-Aligned countries. To undertake the tasks after developing not only a body of empirical studies but also a series of General theoretical proportional that explains the character of Movement. It has been observed by two big revolutions that have transformed the old international order in the 20<sup>th</sup> century (Easterlin, 2019), when the Bolsheviks took power in Russia and formed a socialist system in 1917. After World War II, the decolonization process occurred in Asia, Africa, and the Caribbean. The revolution of 1917 resulted in the emergence of a single central power, the Afro-Asian anti-colonial revolution brought into existence, most of which were small or middle-sized, underdeveloped, and politically weak. Internally the peoples are fragmented. Creating the new political structures and its dissolving traditional feudal institution, these societies have been trying to escape from under development for the past 30 years. These are the nations whose governments have joined together and formed as the NAM. The existence of NAM came when several countries refused to join either the capitalist or the communist bloc of the post-war time. NAM tried to transcend the Cold War, but the NAM ended up as one of the Cold War's chief victims. During the Movement's first dozen years (1961–1973), four Cold War developments shaped its agenda and political orientation (Luthi, 2017).

In this circumstance, newly Independent countries chose a policy of Non-Alignment in International relations. NAM is an international organization that does not want to be officially aligned with or against any significant power bloc. The Movement has 120 members, 17 (observers) countries, and 10 Observer organizations (MoEA, 2020). With 120 member countries, the NAM represents one of the largest international organizations (NAM, 2020). Almost all the Asian, African, and Latin American states are members, and they have come together despite all the political, economic, and cultural differences between them.

Membership Criteria of the Movement of Non-Aligned Countries (MoEA, 2020):

1. The Country should have adopted an independent policy based on the co-existence of states with different political and social systems and Non-Alignment. It should have shown a tendency to favor such an approach.
2. The Country in question should consistently support national independence movements.
3. The Country should not be a member of a multilateral military alliance concluded in the context of significant power conflicts.
4. If the Country has a bilateral military agreement with great power or it is a member of a regional defense pact, the contract or treaty should not have concluded deliberately in the context of significant power conflicts.

5. If the Country has granted military bases to a foreign power, the concession should not have made in the context of significant power conflicts.

### **Member Countries of the NAM**

Afghanistan, Algeria, Angola, Antigua and Barbuda, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belize, Benin, Bhutan, Bolivia, Botswana, Brunei Darussalam, Burkina Faso, Burundi, Cambodia, Cameroon, Cape Verde, Central African Republic, Chad, Chile, Colombia, Comoros, Congo, Côte d'Ivoire, Cuba, Democratic People's Republic of Korea (DPRK), Democratic Republic of Congo, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, Equatorial Guinea, Eritrea, Ethiopia, Fiji, Gabon, Gambia, Ghana, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, India, Indonesia, Iran, Iraq, Jamaica, Jordan, Kenya, Kuwait, Lao Peoples' Democratic Republic, Lebanon, Lesotho, Liberia, Libya, Madagascar, Malawi, Malaysia, Maldives, Mali, Mauritania, Mauritius, Mongolia, Morocco, Mozambique, Myanmar, Namibia, Nepal, Nicaragua, Niger, Nigeria, Oman, Pakistan, Palestine, Panama, Papua New Guinea, Peru, Philippines, Qatar, Rwanda, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, São Tomé and Príncipe, Saudi Arabia, Senegal, Seychelles, Sierra Leone, Singapore, Somalia, South Africa, Sri Lanka, Sudan, Suriname, Swaziland, Syrian Arab Republic, Tanzania, Thailand, Timor Leste, Togo, Trinidad and Tobago, Tunisia, Turkmenistan, Uganda, United Arab Emirates, Uzbekistan, Vanuatu, Venezuela, Vietnam, Yemen, Zambia and Zimbabwe.

### **Observer Countries of the NAM**

Argentina, Armenia, Bosnia-Herzegovina, Brazil, China, Costa Rica, Croatia, El Salvador, Kazakhstan, Kyrgyzstan, Mexico, Montenegro, Paraguay, Serbia, Tajikistan, Ukraine, Uruguay.

### **Observer Organizations of the NAM**

African Union, Afro-Asian People's Solidarity Organization, Common-wealth Secretariat, Hostosian National Independence Movement, Kanak Socialist National Liberation Front, League of Arab States, Organization of Islamic Cooperation, South Center, United Nations, Secretariat of the Commonwealth Nations, World Peace Council (NTI, 2018).

The Non-Aligned Movement established in 1961 in Belgrade, SR Serbia, Yugoslavia through an initiative of the Yugoslav President Josip Broz Tito, Ghana's first President Kwame Nkrumah, Indonesia's first president Sukarno, Egypt's second President Gamal Abdel Nasser, and India's first Prime Minister, Jawaharlal Nehru (the University of Virginia, 2019). These leaders believe that developing countries should

not help either the eastern or Western blocs during the cold war. After this commitment, it took the first conference of heads of state or governments of Non-Aligned countries. The unilateral state's declaring itself as independent from the sphere of international influence. The roots of Non-Alignment are many and variable factors agreed to play a significant and interactive role in the development of the Non-Aligned Movement, the economic underdevelopment of newly formed states, polarized international relations, and the UN global security system.

### **Origin and Ideologies of Non-Alignment Movement**

Non-Alignment Movement is an independent Movement that follows their plan and policies based on their national interest where states without joining any of the power blocs falling under their influence. Their approach should be individual for their national interest. In other words, Non-Alignment holds each state's freedom and choice of action in the international arena. As well as one of the essential aspects of Non-Alignment is its antipathy to military alliances. Asia and Africa are the newly independent countries with almost identical economy problems, government, development, etc. (US Department of State, 2009). To fulfill the aims of debating and advancing a strategy designed to achieve such objectives, the Bandung Asian-African Conference was held in Indonesia in April 1955 (Timossi, 2015). The first post-colonial generation of leaders attended a conference where 29 heads of state and governments participated and expressed the goals to identify their issues at the time and coordinate policies to tackle them. It was held in April 1955. The ideological view may be different between Asian and African leaders. There was a common goal that united them and gave sense to closer co-ordination of positions. Non-Alignment based on Panchasheel (MoEA, 2004), five international co-operation principles, which accepted as an active part of Non-Alignment. The Panchasheel refers to respect for each other's sovereignty, mutual non-interference, mutual non-aggression, peaceful co-existence, and equality and mutual benefit. They shared programs that include the political decolonization of Asia and Africa. To some, Non-Alignment means a negative attitude to world affairs. Many countries suggested the abandonment of the terms in favor of a new name, which would express the ten positive attitudes and objectives. There have been some differences in the emphasis meaning and its implications of Non-Alignment.

The Founding Principles of the Non-Aligned Movement (Timossi, 2015):

1. Respect for fundamental human rights and the purposes and principles of the Charter of the United Nations.
2. Respect for the sovereignty and territorial integrity of all nations.
3. Recognition of the equality of all races and the equality of all nations, large and small.

4. Abstention from intervention or interference in the internal affairs of another country.
5. Respect for the right of each nation's rights to defend itself singly or collectively, in conformity with the Charter of the United Nations.
6. Abstention from the use of arrangements of collective defense arrangements to serve the particular interests of any of the big powers, and abstention by any country from exerting pressures on other countries.
7. Refraining from acts or threats of aggression or the use of force against the territorial integrity or political independence of any country.
8. Settlement of all international disputes by peaceful means, such as negotiation, conciliation, arbitration, or judicial settlement, and other peaceful means of the party owns choice, in conformity with the Charter of the United Nations.
9. Promotion of mutual interests and co-operation.
10. Respect for justice and international obligations.

They also addressed the active leading role of the Movement in the coordination of efforts among member states for tackling global threats. The principle brought to the Non-Aligned Movement by the Bandung principles and during the First NAM summit in Belgrade in 1961.

### **Role and Activities of the Non-Alignment Movement**

Non-Aligned Movement has a precious perspective in foreign policy in the context of the emergence of new states of Asia, Africa, and Latin America, and as well as in the international Movement. The observers and protagonists traditionally depicted the Cold War as a bipolar conflict predominantly fought out in Europe. According to this interpretation, the two superpowers – the Soviet Union and the United States – approached the war as a zero-sum game that did not allow for any space between their respective blocs. The two major colonial powers, Great Britain and France were obliged to discuss political realities. In realist, standpoint favors the maximization of capacity by force or being allied with the passion and the pursuit of an interest-serving strategy flexible in changing enemies instead of varying interests. Two basic realist premises can be used to assess NAM's viability:

1. International politics is a zero-sum game among the power-seeking states to recognize one another as an independent state but never accept the principle of non-intervention unconditionally, and
2. The balance of order and security can be maintained by shifting alliances among states, preventing one from being overwhelmingly powerful.

In the history of the Non-Alignment Movement, there have been thirteen summits, which are recognized as the most important summits. In the first summit, 25

participants, three observers, and fifteen liberation movements, whereas in the second summit, was in Cairo 1964 with 47 participations, ten observers, and ten liberation movements, and In the third summit in Lusaka 1970 with 54 participants, nine observers, and nine guests. The fourth summit was held in Algiers in 1973 with 75 participants, nine observers, and twenty-five guests. The sixth summit was in Havana 1979 with 93 participants, 12 observers, and eight guests (the previous was in Colombo 1976, with 86 participants, ten observers, and seven guests). The seventh summit was in Delhi in 1983, with 100 participants, ten observers, and ten guests. The eighth summit was in Harare in 1986 (101 members, ten observers, 12 guests). The ninth conference was again in Belgrade in 1989, with 100 participants, sixteen observers, and 42 guests. The tenth summit was in Jakarta 1992, with 102 participants, seventeen observers, and 41 guests. The Tenth Summit represented a kind of continuity. The following three are held in different circumstances and contexts.

The neutrality and neutralism or Non-Alignment did not share the same origins and history during the Cold War. Neutrality was not only a much older and more established policy. During 1648 war-torn emerged in Europe following the peace of Westphalia (Tischer, 2019). It was recognized for the first time in 1815 when the great powers guaranteed Switzerland's neutrality at the Congress of Vienna. But it was with the Hague Conventions of 1907 that neutrality per se codified in a body of rights and duties. According to the Fifth Convention, the territory of a neutral power is inviolable; a neutral power must not allow a belligerent country to violate its part; a neutral state is not called upon to prevent the export of weapons and other means for war to one of the belligerents and, if it does choose to restrict arms exports, every measure of restriction or prohibition must be applied impartially to both belligerents. In contrast to neutrality, neutralism and Non-Alignment could not look back on such a distinguished yet also controversial history. The concepts of neutralism and Non-Alignment were only clearly formulated in reaction to the Cold War and as a consequence of decolonization. The Non-Aligned Movement has played a vital role in accelerating the process of decolonization by politically and morally strengthening the freedom struggles of the colonized countries and pressurizing the colonial powers through the United Nations, other international forums and world public opinion. In the United Nations, Non-Aligned had primarily developed its activity. Their ambition, the Non-Aligned, has remained throughout the previous decades a moral-political force, with modest concrete effects in international relations. They have raised their voice to the solution of various crises and participation in a peacekeeping operation. The Tehran summit as the beginning of a new era in the politics of Non-Alignment, 120 member states at the conference itself proof that NAM relevance is still inviolable. The issues that thought the Cold War context under which NAM came into existence were no longer present.

Small and developing countries were encountering similar concerns, including interferences in the USA. The unilateral decision making in the USA and its allies, makes the UN Security Council dysfunctional, and third world countries need a platform to voice their demands. The summit has failed to uphold the collective concerns of developing countries such as environmental, security concerns, energy crisis, and civil conflicts in the financial sectors of the third world people.

The first-ever virtual summit was organized by the chairman of the NAM, Azerbaijani president of Ilham Aliyev. In this summit, 40 heads of state joined and called "United against COVID-19". The president also addresses among the Movement members. He ratifies unity among the members in these challenging times, and countries cannot win over these battles against the invisible enemy without agreement. He assured all the members that mutual support among the group's members is an essential factor in the present situation. On the other hand, the establishment of operative headquarters, the enforcement of a special quarantine regime since 24th March. The establishment of a special Coronavirus support fund and government-sponsored 3.5 billion rescue package extended to the economy and social benefit.

### **Challenges**

As time passes, the political scenario also changes while it comes up with new challenges for the Non-Aligned Movement. Where the challenges come, it comes up with a solution also just we need to have a vision for future welfare.

The plan and policy for the Non-Aligned Movement seek consensus and coalition with the member states. The NAM is emerging as the new millennium's power striving to be open, democratic, and forward-looking. The political scenarios as changing times have thrown up new challenges for NAM. The ongoing sceneries have thrown up new challenges for NAM. These challenges have come up to the solution. NAM is aware of threats facing humankind – transnational crime, terrorism, violation of human rights, and environmental degradation (IIFNAS, 2020). They have found an ordinary desk where they can discuss and work out strategies to tackle global problems of peace, security, development, and terrorism, human rights, and environmental safety. These are problems that extend beyond national borders and require a global approach for solutions.

A Conference of Foreign Ministers of Non-Aligned country held in Belgrade in 1978. It focused on the Non-Aligned philosophy on human rights. The conferences committed to the furtherance of human rights. The Charter of the United Nations and the Universal Declaration of Human Rights Efforts in furtherance must be consistent. The perspectives of NAM are that human rights cannot isolate from national, economic, and social contexts. The Non-Aligned are opposed to the exploitation of human rights

as a political instrument of the great powers. The nation and international level need to promote and protect human rights with proper conditions. The human rights problem is the primary concern of all nations. The developing countries have to work in concert to face a threat to human rights. In the 1992 Jakarta Conference, NAM members coordinate their position and actively participate in the world conference's preparatory work on Human Rights in June 1993. The Jakarta Declaration knew as respect for human rights based on universality, impartiality, and non-selectivity.

In the upcoming days, the Non-Aligned Movement is approaching the new field where they are facing common problems regarding peace and prosperity, the creation of a new international economic order. These new approaches regarding the human environment are one of the most essential agendas in recent years. The environment is a common factor, which is most essential to living and non-living beings as the earth, air, water, and energy from the sun. So, to measure the impact of environmental degradation on future development, all of us need to be attentive. Ecological degradation has been posing a real threat to every form of life on our planet.

### **Way Forward**

The future relies on the present, where we have come up with plans and policies. The NAM is one of the international platforms for developing and under-developing countries. Finally, the Non-Aligned Movement redefines its purpose and ideology to the world after the end of the cold war and colonialism. The important question to NAM is whether it can apply to contemporary issues like ideologies and principles. The NAM has a space for 'dialogue talks between the developing world where it has given more importance to its principles of multilateralism, equality, and mutual understanding in attempting to become a stronger voice of developing nations. Currently, many states are eager to be a part of this Movement where they can share their mutual problems as they found a gateway to resolve and find a way to tackle problems.

At the end of the Cold War, a western diplomat who was observing the Jakarta summit opined that "a lot of these tiny nations are praying that the (Non-Aligned) movement can survive and advocate on their behalf" (Keethaponcalan, 2016) because most of the nation's aren't capable of doing it for themselves. Most of the countries that played a pivotal role in forming the NAM were former colonies, which gained independence through sustained campaigns against colonial control by the European states. For example, India, Indonesia, and Egypt managed to break out of colonialism after World War II (Keethaponcalan, 2016).

The main reason behind that unified most of these states was colonialism as the anti-colonial had an interest in freeing the rest of the third world from the colonial era. It pointed out that the colonial office in London still believed that self-government for

west Africans was decades away and that the opportunities for East and central African colonies were even more remote. It was focus on colonialism and declares decolonization as one of its primary objectives. With the changing of world politics, it is hard to justify the national interest where the dynamics of politics keep ongoing changing. Meanwhile, the formation of Non-Alignment was not wholly to the bipolar world cold war between two blocs. It was that the member-states aimed at the protection and promotion of their respective national interest. The new atmosphere pointed out between bloc rivalries have made the policy of Non-Alignment redundant and obsolete. They have not realized that many dangers that could derail these positive processes still exist. Indeed, the growing understanding and rapprochement between the superpowers have contributed significantly to security and peace at the global and regional levels. This positive development, one must not rule out the danger or threat to global and regional security.

The global security mechanism has established to cover equally all over the world. The achievement toward disarmament has not achieved to date. The superpower nations have a strong point that there has still been no radical turning point that would deliverable more stable world peace and security to all the countries, based on principles of independence, equality, and other principles of active and peaceful co-existence. In international relations, neither any country joined in the process of detente and extending such issues. Non-Alignment is not just against the bloc division or as bloc politics but also for the aspects of a single World, world unity, and interdependence of all legitimate interests vested towards their sovereignty. Likewise, Non-Alignment is not just against the Cold War or any other war but is also for universal peace and equal security for the entire international community. At the Belgrade summit, the Non-Aligned countries came up with special prominence to economic problems, which were increasingly intimately affecting their fate and the future of the world. It has been noted that world stability cannot be achieved without resolving the economic and social questions of the developing countries. The NAM in the years to come will be the struggle for combating the inequalities and injustice characterizing the present world economic system. This is the central issue that indicates the future relevance of the NAM.

The Bandung Principles have adopted at the Havana Summit in the Declaration on the Purposes and Principles and the NAM Role in the Present International Juncture, the Bali Commemorative Declaration on the fiftieth anniversary of the establishment of the NAM. The best way to get a sense of the NAM in the 21st century is to summarize its media communication at the end of its 17th summit was hosted in the Bolivarian Republic of Venezuela. In this summit, they laid out its objectives as (IRNA, 2016):

1. strengthening and revitalization of the NAM

2. Strengthening international peace and security
3. The right to self-determination. The only case specified is a demand to end the Israeli occupation of Palestine's West Bank and East Jerusalem and an end to the Israeli occupation of Syria's Golan Heights.
4. Disarmament and a nuclear-free Middle East (here, Israel and its A-bomb stockpile were not mentioned by name).
5. The protection and promotion of Human Rights and the principles of the UN Charter.

### **Conclusion**

Non-Alignment today has become one of the dominant trends in international relations and politics. The growing membership of the NAM testifies to its popularity and increasing relevance. The achievement of the NAM is that it has become an alternative policy, promoting co-existence, peace, disarmament, predominantly nuclear, the equal relationship among states, and opposition to bloc division and policy. Its negative characteristics were, in substance, the attitude of confrontation, instead of dialogue with extraordinary powers and the developed world. The system of Non-Alignment is the product of the Cold War between the USA and the USSR. It represents the hopes, desires, and aspirations of the overwhelming majority of the world population who have suffered from colonialism, imperialism, racialism, and neo-colonialism and who denied the right of self-determination. Its main objective is to judge an issue by its merits. The Afro-Asian and Latin American countries have shaped and practiced the policy of Non-Alignment through their foreign policies for more than three decades.

The Non-Aligned policy is not neutral but a dynamic one and the Non-Aligned countries are not following isolationist policies. Non-Alignment has been changing qualitatively at different stages from its inception. At the beginning of the 1960s, the Non-Aligned system was mainly concerned with peace and security. In the middle of the 1960s, its emphasis was on anti-colonialism, and at the end of the decade, it focused its attention on the economic development of Non-Aligned countries. Non-Alignment transformed itself into a collective Movement of the Third World countries in the 1970s. At the beginning of the 1980s, it concentrated on disarmament and world peace, restructuring of international economic relations, complete eradication of colonialism, and democratization of international relations. At the 1980s to 1990s, thanks to the rapid changes in international relations, it focused its attention on economic and environmental issues. The Non-Alignment has grown from a policy to a Movement and shifted its focus from world peace and security to economic and environmental issues between the first Belgrade Summit Conference and the ninth Belgrade Summit

Conference. The members of the Non-Aligned Movement, by eliminating regional conflicts, colonialism, imperialism, neo-colonialism, racialism, and apartheid, have helped from time to time to establish world peace. The NAM has contributed towards the promotion of the genuine independence of states and peoples and the democratization of global relations and in creating conditions conducive to international peace, security, justice, equality, and co-operation in the world.

The NAM was big role in bringing the two Super Powers together for negotiations to reduce tensions between them in the interests of world peace. The NAM's role in establishing world peace by solving various political conflicts such as the Korean War and the problems of Kampuchea, Vietnam, Congo, Iran, Iraq, Namibia, the Middle-East, etc. have been significant. The NAM always has adapted itself to the changing circumstances and conditions in international relations between the first Belgrade Summit Conference and the ninth one and worked towards tackling new issues from time to time.

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## Socio-Cultural Impacts of COVID-19 in Nepal

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### Abstract

*The COVID-19 pandemic has considerably distorted the social and cultural life of people on a global scale. It has a profound impact on the dynamics of human mobility, in & out - migration, economy, and socio-cultural correlation that underpin population diversity. It seen that some of these effects are short-lived, but others will have long-lasting implications that can see in the future. The COVID-19 crisis is exposing the fragility of all our systems, our complex dependence upon one another, livelihood patterns and health, and healthcare as the most basic of human rights. Health security is one of the essential parts of social safety, which encompasses material or economic security; the security of life, and protection from violence and conflict, and these all are apprehensive and questionable in this pandemic. Like other developed and developing countries, Nepal is also facing the challenges contrived by the pandemic. This article describes the impacts of COVID-19 in socio-culture sectors and the diverse categories of the people of Nepal.*

**Keywords:** pandemic, interdependence, isolation, deprivation, marginalization

### 1. Introduction

Corona viruses are a family of viruses that cause illness in humans and animals. Seven different types have found in people, including SARS - CV-2 (COVID-19), SARS - CV (Severe acute respiratory syndrome), MERS - CV (Middle East respiratory syndrome), HCV - NL63, HCV - 229E, HCV - OC43, HKU1. Corona virus disease (COVID-19) is a new strain discovered in 2019 and has not previously identified in humans (UN, 2020). It originated in Wuhan, Hubei province of China, a pandemic on 31 December, 2019. The virus has now spread to over 216 countries and territories across the globe and was characterized as a pandemic by the World Health Organization on 11 March, 2020 (WHO, 2020). As of 14 November, the global death toll surpassed 1,309, 431 amid more than 53 million cases. Over 37 million people have recovered from the disease worldwide, and total of 206, 353 cases; 1,202 deaths and 168, 129 have recovered cases in Nepal (World meter, 2020).

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The COVID-19 outbreak has been affected all segments of the society and the human population. Particularly those members of social groups in the most vulnerable situations, including people living in poverty, older persons, persons with disabilities, youth, women, and indigenous people. Early evidence indicates that the health and economic impacts of the virus are being borne inexplicably by poor people like homeless people, people without access to running water, refugees, migrants, jobless, and displaced persons. These people have been suffering disproportionately both from the pandemic and its aftermath – whether due to limited movement, fewer employment opportunities, increased xenophobia, etc. (UN, 2020). Most of the leadership of developed and developing countries have failed to control the impacts of pandemic. Politicians or leaders need to appear in control of the situation to avoid a panic that could be extremely damaging to society and societal values.

## **2. Objectives**

The overall objective of this article is to assess the impact of COVID-19 in the socio-cultural sector of Nepal. The specific aim is to analyze the effects of COVID – 19 in health, education, politics, and different group of peoples of Nepal.

## **3. Methods and data source**

Regarding the above - mentioned objectives, a descriptive method is applied in this study. The data used in the study is mainly quantitative, which are collected from different ministries of Nepal, Nepal Rostra Bank, UNO, UNDP, WB, and UNICEF, WHO, World meter and other national and international organizations.

## **4. Social impacts of COVID– 19**

The COVID-19 pandemic has affected different sectors of society. About six months - long lockdown and curfew have hit Nepal's industries, tourism, entertainment, and transport sectors hard, slamming projected economic growth and pushing three in every five people working in small or micro - enterprises out of jobs. Working from home, attending online classes, and ordering groceries for home delivery are out of reach for the vast majority of Nepal's 30 million people (UNDP, 2020). It has affected all sectors of the economy, society, and cultural practices. Most of the countries, including Nepal, have decreased their budgets in socio-economic development like education, transportation, agriculture, industrial, and other sectors of human development and increased their budget only in health to control the COVID-19 impacts. That is why the majority of countries will think differently after this outbreak to improve their education, health, transport, and other social policies. (Lazily, 2020). Some of the significant social impacts of COVID-19 in Nepal are discussed here.

#### 4.1 Political Sector

Political scientists believed that the pandemic would strengthen the state and reinforce nationalism. Like the previous pandemic, it will also accelerate the shift in power and influence from West to East or vice-versa. In the initial phase of this pandemic, there was also a conflict between the USA and China, China and Australia, and the countries of the European Union. The USA has, for instance, adopted a nationalist approach with ‘America first’ in line with the Trump diplomacy since 2016 (Anton, 2019). China has used the crisis to display the advantages of its model, while Russia has accused of launching a disinformation campaign to destabilize Western democracies. Most countries have been closing their borders, banning exports of protective equipment, or securing exclusive rights for a new vaccine or drug may be beautiful measures for politicians: they can show that their citizens are prioritized. Nevertheless, these measures violate the rules for pandemic cooperation that countries themselves have committed to follow and might make other countries' responses even more challenging (Holsten, 2020).

The impacts of COVID-19 in the political sphere of the world have multiple ideas among the political theorists. It predicted that there will be three things that seem apparent. First, the coronavirus pandemic will change our politics, both within states and between them. Second, this is not yet the end of an interconnected world. The pandemic itself is proof of our interdependence (Menon, 2020). Third, science and technology have to do more things to combats such types of pandemics. Some political scientists believe that the pandemic will change the global political order. It will only accelerate a change that had already begun: a move away from U.S.-centric globalization to more China-centric globalization (Mabhubani, 2020). In the context of Nepal, there was a lot of a debate on the massive foreign aid package under the Millennium Challenge Corporation (MCC), Road and Belt Initiatives of China, the internal conflict of political parties (NPC & NC), Nepal and India engaged in an intense border conflict triggering speculations about internal power-shuffling as well as bilateral diplomacy. This dispute involves a 40-square kilometer stretch of land on Nepal's far-western border with India, which is not far from China (Shakya, 2020). So, the pandemic has mostly affected the political scenarios of the world and inside the country.

#### 4.2 Educational Sector

The COVID-19 pandemic has caused the largest disruption of education in history, having already had a near - universal impact on learners and teachers around the world, from pre-primary to higher level schools, technical and vocational education

and training institutions, universities, adult learning, and skills development establishments. By mid - April 2020, 94 percent of learners worldwide were affected by the pandemic, representing 1.58 billion children and youth, from pre-primary to higher education, in 200 countries (UN, 2020). Similarly, UNESCO (2020) mentions that, the most severe impact of lockdown has on the education sector. In May, 95% of households said their children had stopped going to school, and 52% were not even studying at home. Only 29% had access to distance learning, but that only half were using it (UNICEF, 2020).

In the context of Nepal, around 76 million (7,638,521) students and 8 million (881,986) teachers, including primary, secondary, higher secondary, and university level (MoE, 2019), are out of the educational institutions. Due to the lack of internet facilities, poverty, rural, and weak network system, most of the children of Nepal are out of educational institutions. According to UNICEF (2020), only about 12% of Nepali children take classes online, or through radio/TV. Even here, the disparity is stark: while up to a third of children in higher - income households were using distance learning tools, only 5% in more impoverished families were doing so. The recent Child and Family Tracker survey by UNICEF (2020) Nepal shows that more than two-thirds of school children are underprivileged of distance learning. Only three out of 10 children have access to television, radio, and Internet-based learning platforms. Among them, only 80 percent of children use distance learning platforms for their learning activities. It indicates that even in the pandemic poverty gap is also the major factor to create the educational class in the developing world, including Nepal. COVID-19 has tested the limits of Nepal's education system, and much progress remains to be made to improve children's learning environment (WB, 2020).

### **4.3 Health Sector**

Frontline health workers, including doctors, nurses, certified caregivers, lab technologists, and pharmacists, have been mostly affected by the pandemic, due to the inadequate supplies of PPE and other health - protective tools and lack of the good policies of the government. While trying to balance life as a healthcare professional and as a family member, dealing with highly infectious clients has led to guilt about potentially exposing their families to infection (Ramaci et al., 2020). Contracting COVID-19 has increased stigma and social discrimination among people. Some house owners have reported to evict nurses, doctors, and other medical professionals from their rental apartments, fearing the spread of the novel coronavirus in their neighborhood. The Chairperson of Nepal Medical Association, Dr. Lochan Karki mentioned that "health workers are being attacked, humiliated and intimidated due to

fear that since they are infected, they will jeopardize the lives of others in society." He further added that,

People forget that they could get infected and others could turn against them.

There has been erosion in humanity, and this is a dangerous sign in itself for our society. These attacks on health care speak to the importance of adequate risk communication at all levels of society to reduce fear, stigma, and ultimately, violence (Cited in Poudel, 2020).

Against these social attitudes, health personnel have invested their time without compromise their own and family life. According to the Medical Council of Nepal (2019), there are 26346 doctors and 7758 specialists registered in Nepal. Among them, over 1000 health workers, including 180 doctors, have infected as of now. Hence, by understanding the disease, building trust, showing empathy to those affected health personnel, and adopting effective practical measures, people can save their dear ones (UNICEF, 2020b), and only we can fight collectively against COVID-19 effects in society.

#### **4.4 Social deviances**

The COVID-19 pandemic has drastically changed human life on a global scale. Nearly overnight, in countries worldwide, routines reduced to all, but a handful of activities, and daily mobility patterns became concentrated around our homes. Social distancing measures and lockdowns, for example, have had an impact on violent street crime, often linked to organized criminal activity. Crimes of opportunity thrive on routine activities (Wickes, 2020). National Academies of Sciences Report (2020) mentioned that "Social isolation has been associated with a significantly increased risk of premature mortality from all causes," the report found, including a "50 percent increased risk of developing dementia, 29 percent increased risk of incident coronary heart disease, 25 percent increased risk for cancer mortality, 59 percent increased risk of functional decline, and 32 percent increased risk of stroke." The mental health risks are also profound. The researchers reviewed dozens of studies and found a consistent relationship between social isolation and depression, anxiety, and suicidal ideation (Klein, 2020). Some of the deviances due to pandemic in Nepal mentioned on the following points:

##### **4.4.1 Suicide**

According to Durkheim (1897), suicide is any death which is the immediate or eventual result of a positive (e.g., shooting oneself) or negative (e.g., refusing to eat) act accomplished by victim himself. In particular, suicide can be understood as a kind of sociality, as a special kind of social relationship, through which people create meaning

in their own lives (Staples & Widger, 2012). It is a very crucial and treacherous issue in the contemporary world. Every 40s, one person dies by suicide, making global deaths due to suicide to 800,000 each year, out of these 79 % are from low- and middle-income countries (WHO, 2018). World Health Organization reported that many of suicides occur during pandemic a crisis. The pandemic of coronavirus disease (COVID-19) has intense effects on the mental health of general people, and consequently, the suicide rate rises. Like other LMIC, Nepal has been experiencing increasing deaths due to suicide each year, with 5124, 5317, and 5785 suicides in the year 2017, 2018, and 2019, respectively. During the COVID-19 pandemic, suicide cases in Nepal have increased by 20 %, and the rate of mental health illness predicted to see a further rise after the pandemic (My Republica, 2020). In lockdown period, a total of 2,218 people committed suicide, a staggering rise in the cases. The number shows that at least 20 people committed suicide every day during the lockdown compared to 15 suicide cases a day in the last year. Before the lockdown, the number of suicide cases used to stand at an average of 400 per month (Neupane, 2020). Psychiatrists have linked suicide with the mental health of people, and sociologists/anthropologists linked it to the socio-cultural and political mentality who has forced to stay indoors during the lockdown, curfew, and personal distancing. The sudden economic recession, unemployment, poverty, and financial distress might lead individuals to contemplate suicide (Poudel & Subedi, 2020), which also correlated with the pandemic.

#### **4.4.2. Child marriage**

Increase child marriage and girls trafficking is another social impact of COVID-19, which is common in the third world like Nepal. The Malala Fund (2017), estimates that 10 million more secondary school girls worldwide could be out of school once the crisis has passed. The lockdown has affected education worldwide, and children have no alternative work in their home. During the lockdown period, the girls between the ages of 14-17 in rural areas mostly, the western part of Nepal, have run away from home to get married to classmates or local boys. Although the country has committed to ending child marriage by 2030, it raised the minimum age of marriage to 20 in the 2018 Civil Code. Yet more than 36% of girls continue to marry before they are 18 (Bhattra, 2019). Lockdowns, school closures, and economic downturns linked to COVID-19 are disproportionately affecting girls, with reduced access to sexual and reproductive health services and a rising incidence of harmful practices (Anderson & Gouch, 2020). It is reported that young girls are to be getting married by themselves, in an alarming circumstance. So, in the period of lockdown, the rates of child marriage get increased in comparison to the other familiar situations.

### 4.4.3 Gender - Based Violence and Women

Gender violence was a growing problem in Nepal before COVID-19. The UNPFA (2020) suggests that 48 percent of women in Nepal had experienced violence at some point in their lives, with 27 percent of them experiencing physical violence. Besides, 61 percent of them had never told anyone about the abuse. Women Rehabilitation Center (2020) reported that 624 cases of Gender - Based Violence (GBV) between March to May from 55 districts during the lockdown period (Neupane, 2020). A study published in the Kathmandu Post mentioned that every ten minutes, a woman somewhere in Nepal dials 1145, the helpline operated by the National Women Commission (NWC), seeking assistance. The majority of these calls are made by survivors of domestic violence who are either looking to report incidents of abuse or calling to inquire about the support services offered by the group. (K.C., 2020). The mean score of the rigorousness of impact of COVID-19 for females is high due to their inability to find an alternative source of income, which is followed by the incapacity to pay loans, psychological problems, incapability to find a new job, and inadequacy to purchase the food (UNDP, 2020). Besides this, there are various causes like social, cultural, sexual, psychological, political, etc. of gender - based violence in Nepal.

### 4.4.4 Rape cases

According to the Nepal Police's latest statistics, 2,144 rape cases and 687 attempts to rape cases reported in 2019/20. In the past two months alone, as many as 420 cases of rape registered. Rape cases have surged mysteriously in Nepal despite the COVID-19 pandemic. According to Nepal Police, the number of other crimes decreased during the lockdown except for rape and suicide cases (Nepal Police, 2020). The survivors are often minors who are at high risk of being exploited. According to WOREC (2020), there were 367 cases of rape reported in the last six months (April/May to September/October 2020). Of these rape cases, 44 were gang rapes. The most upsetting fact revealed by the report is that of the total rape victims, 283 are girls below 18 years of age, including 39 victims between two and ten years (13 percent) and 244 between 11 and 18 years (86 percent) (cited in khabarab online). Most of these cases are in minors, which is very critical and dangerous. According to Rising Nepal, a 13-year-old girl was raped by a 20 - year-old boy; a 17-year-old girl was gang - raped by a group of nine men in Sunsari, an 8-year-old girl was raped by a 14-year-old boy in Rupandehi, and a 61-year-old father was arrested on the charge of raping his 16-year-old daughter on multiple occasions (Karki, 2020). These severe cases are the examples of the lockdown period which indicate the future trends of the Nepalese society and psychology of the people.

#### **4.5 Vulnerable Group**

The Group of people who experience a higher risk of poverty and social exclusion than the general population are known as vulnerable people. Recently, People in Need (PIN) and Community Self-Reliance Centre (CSRC) has conducted a multi-sectoral needs assessment in 21 districts to assess the impact of COVID-19-related measures on the lives of vulnerable communities affected by earthquake and other natural disasters. According to the report, 65% of households reported reduced market access; 54% of households with access to the market could not make purchases as usual. Similarly, 65% faced food shortages, among which 51% had food supplies sufficient for 2.5 weeks or less; 87% experienced a decrease in payment or are currently without any income at all; 45% reported no or limited work opportunities for unskilled labor as one of the reasons, and 81% reported income loss as the most significant issue they are currently facing due to lockdown and COVID-19 (PIN, 2020). Like other disasters, the ethnic minorities, migrants, disabled people, and homeless peoples are more affected by this pandemic.

#### **4.6 Dalits**

Caste-based discrimination, untouchability, deprivation, poverty, etc., are the root cause of the problems Dalits face. Dalits in Nepal have been a socio-economically, culturally, and politically excluded and marginalized community for centuries, although they have large about 13.6 percent of the total population (CBS, 2014). Dalits are not homogenous; they have a wide range of diversity based on religion, geography, impairments, and other characteristics. The degree of impact caused by the COVID-19 pandemic also varies with these intersections. During the COVID-19 pandemic, few Dalits provided with some food items as part of relief packages. However, many more left behind in accessing these benefits due to the lack of information, and formal documents (Gahatraj, 2020). Dalits have been facing the problems of health facilities, quarantine and isolation in the pandemic. There are lots of discrimination events during the pandemic. A study conducted by Samata Foundation, 56 caste-based discrimination cases reported during the three-month lockdown period. Among them, eight caste-based discriminatory behaviors happened in the quarantine centers. A Dalit woman was beaten up by a Ward Chairperson during relief material collection in Mahottari district (Bishwakarma, 2020). Similarly, Kalpana Nagari and Kalawati Audi from Godavari Municipality face double discrimination from society for being Dalit and because their relatives tested positive for COVID-19 after returning from India (Chaudhary, 2020). Two recent cases, the killings of six men in Rukum (West), and Angira Pasi in Rupandehi (Shrestha & Aryal, 2020) are crueler, exposed, and politicized issues, and it

proved the government incapability to control the discrimination.

## 5. Indigenous Peoples

Indigenous Peoples in Nepal composition for 35.81 percent of the country's total population (CBS, 2012). Despite constituting such a significant portion of the community, they have marginalized in terms of language, culture, and politics as well as economic opportunities throughout history. Official information and communications on COVID-19 are disseminated in the national language and remains mostly inaccessible. So, the main issue regarding COVID-19 is the language barrier as most indigenous communities do not speak the Nepali language, and many are illiterate (IDA, 2020). Similarly, many technical words used, such as self-isolation, social distance, PPE, PCR, etc. are challenging to understand by the indigenous people. Also, indigenous people's issues in relation to Covid-19 are positively affected on their economic, social and health that linked with political decisions. The majority of indigenous people are absolutely concerned by financial crises like joblessness, food crisis, etc. due to COVID-19.

## 6. Old age People

The discourse around COVID-19, in which it perceived as a disease of older people, exacerbates negative stereotypes about older persons who may be viewed as weak, unimportant and a burden on society. Such age-based discrimination may manifest in the provision of services because the treatment of older persons may have perceived to have less value than the treatment of younger generations (UN, 2020). In many countries, including Nepal, older people face the most threats, and challenges during the COVID-19 period. According to the WHO report (2020) over 95% of deaths occurred in those older than 60 years. More than 50% of all fatalities involved people aged 80 years or older. In comparison to others, more senior people face a significant risk of developing severe illness if they contract the disease due to physiological changes that come with aging and potential underlying health conditions. The recent cases that appeared in social media, esp. in the news portal, show that people having low immunity power and having chronic disease patients like heart, lungs, high sugar, and high blood pressure, etc., are seen more vulnerable in COVID-19. Hence, the pandemic is more critical for old age people who are above 60 years.

## 7. Cultural Effects of COVID-19

Nepal is not only the land of mountains; it is also the land of feasts, festivals and jatras. There are more than 50 festivals countrywide celebrated in Nepal every year (Nepal Nomad, n. d). The lockdown has shut down the cultural and traditional life of

the Nepalese people. Many communities - level jatras, pujas, and key festivals have canceled due to the spread of the coronavirus. Even if the celebrations have celebrated in Nepal, small processions have held with masked devotees. This indicates the importance of culture and tradition in this precarious situation that the coronavirus has created. Due to COVID-19, the festivals muted; the songs and music not heard in the alleyway of Kathmandu but complete silence, the silence of cultural cry. This cultural cry was recently converted into aggression when the government failed to coordinate with the concerned stakeholders to conclude the pulling of the chariot of the Rato Machhindranath (Jung, 2020). Later, a symbolic chariot pulling performed after the next violent clash between locals and police, and curfew in the Lalitpur Metropolitan City. Due to lockdown, other jaatra such as IndriJakarta, GayJakarta, BasketJakarta, and festivals like Tee, Chair Dashing, and others like BelauJakarta, Buddha Ajanta, Dalai Lama's Birthday, Jana Purina, Naag Panchami, Krishna Astami, etc., were canceled.

### **8. Conclusion**

The pandemic generated impacts mainly from lockdown, curfews, self-isolation, social distancing, and quarantine have affected the overall physical, mental, spiritual, cultural, economic, and social wellbeing of the people of Nepal. The pandemic has generated big questions in the survivors of human life, life patterns of the people, internal, and external connectivity or migration, health facilities and role of government in a pandemic. According to Geltner (2020), this pandemic has raised some critical issues in human history. The painful death may be individual; the current pandemic's impact collectively dovetails with biological and cultural expectations. Many cultures used to older and frailer people dying; only now, it's happening sooner and perhaps more tragically. A large amount of human deaths accelerates the redistribution of wealth and power and alleviate emotional pressures associated with caring for the chronically ill. Both can be defended as sustaining an accepted social order without it is questioned. It also challenging the health system of welfare and socialist states and suggest that resources may redirected to help survivors and attain a new equilibrium in society. Not only these issues, but this pandemic has also devastatingly affected the social, economic, psychological, and cultural life of people and an increase the rate of suicide, girl trafficking, child marriage, and death of old age people. This pandemic also raises the health consciousness among the people the need to protect the environment, traditional human habits, and nature.

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## Performing Gender: Female Masculinity in D. H. Lawrence's *The Rainbow*

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### Abstract

*This paper analyses Ursula, the female protagonist of D. H. Lawrence's the novel The Rainbow, who reflects her masculinity. Many feminist critics have perceived this novel as man-centered. In response to this analysis of the novel, the paper tries to look at the novel from the perspective of Judith Halberstam's theoretical concept of female masculinity, especially Ursula as a masculine woman who acts like a man. Female masculinity is not an identity but a site for identification where different identities can flourish, but masculine women possess confidence, assertiveness, and independence. Lawrence gives justice to women's role by presenting Ursula as a new woman who seeks her individual identity in the traditional world. Through the reading of the novel as its theoretical tool, the research concludes that females can be as males and males can be like females. She acts like a man and that means she has masculine qualities. The novelist portrays Ursula as a woman with masculinity because she can flourish different identities of her life. She plays the role of an independent woman, a liberated woman, a Lesbian woman, and a new woman, etc. She behaves like a tomboy who refuses to accept the Victorian conventions of society. So, she is a masculine woman rather than a feminine woman. This paper emphasizes how a woman can perform like a man; this suggests masculinity is not the private property of a male; it is a social position that can be practiced in an individual way.*

**Keywords:** female masculinity, masculine, female, femininity, gender reversal

### Introduction

This article explores female masculinity in D. H. Lawrence's *The Rainbow*, focusing on how the novelist announces the protagonist Ursula as a modern woman as she belongs to the third generation of Brangwen family. She is painted as masculine woman in a very conventional world, with an aim to present the changing role of women in the contemporary society of England. So, the aim of this paper is to discover

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female masculinity through characterization of Ursula's masculine traits. For Halberstam the nagging question is:

What is "masculinity"? This has been probably the most common question that I have faced over the past five years while writing on the topic of female masculinity. If masculinity is not the social and cultural and indeed political expression of maleness, then what is it? I do not claim to have any definitive answer to this question, but I do have a few proposals about why masculinity must not and cannot and should not reduce down to the male body and its effects. (Halberstam, 1998, p. 15)

Female masculinity is an alternative model of gender variation; it is not simply the opposite of female. Judith Halberstam's "*An Introduction to Female Masculinity: Masculinity without Men*" introduces the issue of femaleness or female masculinity. She claims that far from being an imitation of maleness, female masculinity actually affords us a glimpse of how masculinity is constructed as masculinity. In other words, female masculinities are framed, as the rejected scraps of dominant masculinity in order that male masculinity may appear to be the real thing. She introduces the term "heroic masculinity" which has been produced by and across both male and female bodies. According to Paul Smith "[...], masculinity or masculinities are in some real sense not the exclusive "property" of biologically male subject – it's true that many female subjects lay claim to masculinity as their property" (Smith, 1996, p. 8).

Therefore, masculinity is not the property of men. Masculinity in the 1990s has recognized as, at least in part, a construction by female as well as male born people. Halberstam states, "Female masculinity has been situated as the place where patriarchy goes to work female psyche and reproduces misogyny within femaleness" (Halberstam, 1998, p. 6).

Talking about alternative model of gender Halberstam claims, "[...] In alternative models of gender variation female masculinity is not simply the opposite of female femininity, nor is it a female version of male masculinity" (Halberstam, 1998, p. 29). Janet Wolff's *The Invisible Flaneuse Woman and Literature of Modernity: Culture and Society* to criticize the rational, hegemony and rejection of female access in the modern world. Richard Howson's *Challenging Hegemonic Masculinity* is an innovative and radical exploration of domination, gender and social justice. Howson contributes to contemporary understandings of men and masculinity, presenting a detailed examination of hegemonic masculinity. Lawrence has been considered as a modern writer since the early twentieth century. And this modernity is reflected in the way he treats his characters. Ursula's assertiveness serves to define her as modern character. We have to see her not as a variant of man because she is masculine in her own terms. She reflects the intentions which Halberstam has in defining masculinity.

I want to carefully produce a model of female masculinity that remarks on its multiple forms but also calls for new and self-conscious affirmations of different gender taxonomies. Such affirmations begin not by subverting masculine power or taking up a position against masculine power but by turning a blind eye to conventional masculinities and refusing to engage. (Halberstam, 1998, p. 9). This quote basically means that Halberstam wants to talk about a model of masculinity that concerns different classifications of gender and subvert conventional notion of masculinity. Or it does not care about conventional idea of masculinity and just takes up a position against what we have understood to be masculine.

### **The Story of a Masculine Woman**

Ursula begins a lesbian relation with Winifred, one of her schoolmistresses, who later on marries Ursula's uncle. Anton returns after six years. They spend their time like husband and wife when Anton asks Ursula to marry him. She explains that she does not want to be married and Anton feels deeply hurt later on. He marries a girl and both of them go to India. Soon Ursula comes to know that she is pregnant and writes to Anton to return and marry her but she does not get any response. She comes to know that Anton has already married with another girl. One day, while she is away from her home, it starts raining and she gets wet. On the way, she sees horses advancing towards her. The horses reflect male masculinity, which is not real but her hallucination. She tries to escape from them and falls down leading her to miscarriage. Getting up she sees a rainbow that fills her with hope, happiness and an urge to begin a new life.

Lydia Lensky and Anna represent traditional type of women who are dependent on their husbands. They are only limited in their house and child caring. They are very conscious about their role and even they know that they are suppressed by patriarchal ideologies. They have compulsion to accept it. They cannot raise their voice against male domination. So, they are victimized by masculine figures. Tom Brangwen marries Lydia only to fulfill his desire. Will also marries Anna only to fulfill his desire. That means they are fully determined by masculine power. Anton also loves Ursula only for his desire as he is away from her without giving any reason. It shows that he is not devoted towards her. He is not responsible for his love to her. He thinks that nation is most important than his life. He is guided by patriotism as he only thinks about how to save his nation.

In the middle part of this novel, Ursula is seen as a new woman. As a new woman, she joins University College for higher education and works as a teacher in a male dominated society. She keeps homosexual relation with Winifred who is also a modern woman; later on, she marries with Ursula's uncle. When she becomes adult, she gains the sexual experience through her romantic life with Anton Skrebensky; at that

time, she recognizes her identity. She considers that she should have a good knowledge of herself as a woman. This development of her feminine self helps her to keep her relation with the next man. As a result, she turns like a man. Woman had no power to speak against patriarchal authority or self-emancipation until the late 19<sup>th</sup> century. Therefore, they had no chance to get the knowledge from the outside world. However, Ursula successfully gets knowledge and experience from conventional world. Therefore, she can revolt against male masculinity. The performance of such activities establishes her as a masculine woman. She challenges domination of men. Lawrence has not objectified the women's role but he does justice to the woman character through the portrayal of Ursula. Through the position of Ursula, the novelist gives a positive role to women in his novel. He presents the relationship between men and women as growing and changing in course of time. He also believes that women are not only limited in private sphere, but they are also moving to public arena.

Ursula is the only female protagonist who not only explores ways of self-discovery but also takes action to achieve the goal of her life. Here, Lawrence sets the story of three generations of Brangwen families of different ages. The first, Lydia and Tom, the second, Lydia's daughter Anna and Tom's nephew Will, and the third is Anna and Will's daughter Ursula and her lover Anton. Lydia represents an ideal woman who depends on her husband in the pre-industrial phase. At that time, men treated women as sexual object and weak. However, after the industrial revolution, the society underwent radical change because of women's awareness and consciousness about their rights and social status. Men run all the factories, institutions and financial institutions. Women have no chance to work as a superior, manager and supervisor in the same factories. While some women accepted traditional roles some others like Ursula accepted new challenges and acted strongly.

Lawrence clarifies the notion of femininity or female masculinity through this novel. In this novel, Tom and Will treat their wives as a counterpart of their body. They thought that they have masculine power to control over femininity. They believe that women are the sexual objects but Ursula boldly revolts against that attitude and behaviour. She is a revolutionary woman who demands for societal change. She wants to give the message for all women to exist as bold and show masculine action in the society. She seeks to gain her self-discovery. Her struggle does not represent her individual struggle but her struggle represents all women's struggle and suffering. Her experience and education lead her to become as a new woman. They were only limited within four walls of house. They are considered as weak, passive, and even inferior than men. Lawrence focuses on women's consciousness and awareness of their position rather than objectifying their role.

### Textual Analysis

Ursula is essentially a risk taker and always rejecting the secured and ordinary world for more exciting experience of loving another woman and rejection Anton's proposal for marriage in the beginning. She is a determined woman and attacks everything with fervor, especially to be very free from the everyday aspects of this world. She is searching for her own identity and her own beliefs. Angelina Subrayan, in her article "Representation of Hegemonic Masculinity," argues "Not all men attempt to comply with this type of masculinity as there are some who oppose hegemonic masculinity by inculcating alternative masculinities which are subordinate in nature" (Subrayan, 2015, p. 18). She further emphasizes masculinity. Its successful application to a wide range of diverse cultures suggests that relevant social systems legitimize the dominance of men over women. However, most men position themselves accordingly in situations where their choices may be quite restricted. Ursula has a sensitive idealistic nature and is always searching for perfection in herself. Anna and Will subsequent Brangwen generation, develop a modern mentality. The narrator says, "And Anna had a new reserve, a new independence. Suddenly, she began to act independently of her parents, to live beyond them." (Lawrence, 1915, p. 110) This line states that Anna is determined by modern mentality. She also wants independence in her life but she did not take action like Ursula. Hans Ulrich Seeber's article "Utopian Mentality in George Eliot's *Middlemarch* and Lawrence" examines that "Ursula Brangwen, in *The Rainbow* totally rejects the role and possibilities offered to her by society's mechanisms" (Seeber, 1995, p. 38). Ursula refuses to follow the role, which was offered to her by her society's mechanisms. Therefore, she assumes that "She was the female ready to take hers; but in her own way. A man could turn into a freelance: so then could a woman" (Lawrence, 1915, p.232). She was a female who is ready to take action herself in England. Therefore, Lawrence's novel is the symbolic expression of Ursula's utopian dream for a better world that is more equitable toward gender differences in the future.

Female masculinity is an alternative model of gender variation; it is not simply the opposite of female. Judith Halberstam's "*An Introduction to Female Masculinity: Masculinity without Men*" introduces the issue of femaleness or female masculinity. She claims that far from being an imitation of maleness, female masculinity actually affords us a glimpse of how masculinity is constructed as masculinity. In other words, female masculinities are framed, as the rejected scraps of dominant masculinity in order that male masculinity may appear to be the real thing. She introduces the term "heroic masculinity" which has been produced by and across both male and female bodies. According to Paul Smith "[...] masculinity or masculinities are in some sense not the exclusive "property" of biologically male subject – it's true that many female subjects lay claim to masculinity as their property" (Smith, 1996, p. 8). Therefore, masculinity is

not the property of men. Masculinity in the 1990s has recognized as, at least in part, a construction by female as well as male born people. Halberstam states, “Female masculinity has been situated as the place where patriarchy goes to work female psyche and reproduces misogyny within femaleness” (Halberstam, 1998, p. 6).

Offering new possibilities for the experience of women Halberstam claims, “[...] In alternative models of gender variation female masculinity is not simply the opposite of female femininity, nor is it a female version of male masculinity” (Halberstam, 1998, p. 29). Janet Wolff’s *The Invisible Flaneuse Woman and Literature of Modernity: Culture and Society* to criticize the rational, hegemony and rejection of female access in the modern world. Richard Howson’s *Challenging Hegemonic Masculinity* is an innovative and radical exploration of domination, gender and social justice. Howson contributes to contemporary understandings of men and masculinity, presenting a detailed examination of hegemonic masculinity. Lawrence has been considered as a modern writer since the early twentieth century.

When Ursula fails her university graduation test, she is faced with two choices to be a teacher means more difficult and she has to explore in the man’s world. While it seems more attractive to be the wife of Anton, she can depend on a man to have a leisure life in her rest of life. At the very moment, clearly being aware of Anton’s hypocrisy and incapability to help her fulfill her natural self, she rejects him and decides to continue her exploration and pursuit of self-fulfillment as well as self-discovery by herself. She remains one of the finest creations of Lawrence. Her character has a great dramatic significance. Besides the history of a family over three generations, the main character is Ursula. In the late 19<sup>th</sup> century just before the World War I, she is a feminist before her time. We find that she rejects marriage, engage in premarital sex, conducts a homosexual affair and objectified men.

Lydia said, “Resistant, she knew she was beaten, and from fear of darkness turned to fear of light. She would have hidden herself indoors, if she could” (Lawrence, 1915, p. 49). It means that she knew she has been exploited by man and is in darkness but she could not express it. It stands for the weakness for her life. The narrator asserts, “As if he hypnotized her. She was passive, dark, always in shadow” (Lawrence, 1915, p. 46). Her husband hypnotized her as being passive dark and always in shadow. She cannot try to revolt against him’ even she knows everything about her position and situation. However, Yaorong claims, “Lydia has made great progress from an appendix to a relatively independent female self without being subjugated by Tom’s male self” (Yaorong, 2014, p. 138). Thus, Lydia said, “She would not want him enough, as much as he demanded that she should want him. It was that she could not. She could only want him in her own way, and to her own measure” (Lawrence, 1915, p. 78). Lydia did not feel she had married him because she has experience of married life and domination

of male. Yaorong also adds, “Lydia is even aware of her right to refuse Tom’s demand of sexuality. She refuses to serve as sexual object to satisfy man’s desire of sexuality” (Yaorong, 2014, p.138). These lines indicate that it is impossible to imagine for a woman in the Victorian time to pursue sexuality actively.

Therefore, Lydia lives for herself. Tom is just a part of her life and her self-fulfillment. Their relationship is based on marriage, which is natural. The death of Lensky is a turning point for her progress of growth. It is painful for her to escape from the male dominated society and to wake up for the suppressed female self. However, she survives and starts to be aware of her female self. It is impossible for a widowed woman at that time to achieve the goal of self-emancipation but it is a great attempt to start a journey of seeking her female self.

Lydia firstly married Lensky who is superior to her economically and typical result of patriarchal society. She is completely conquered by his authority. Therefore, during that time she has no her female self and acts as a surgical appliance for her husband. Then she chooses Tom for her second marriage, who is a farmer and seems to be inferior and less sophisticated than Lydia. She is a traditional female character in this novel. She also urges, “All women must have a husband” (Lawrence, 1915, p. 63). This means she determines by traditional assumptions and restricts of society. Therefore, she believes that all women must have a husband. That means she is living in a transition phase of British society. Therefore, she cannot totally refuse the traditional role and cannot be very modern. Therefore, Leavis claims, “*The Rainbow* shows us the transmission of the spiritual heritage in an actual society, and shows it in relation to the general development of civilization” (Leavis, 1995, p. 173). So, Lydia has not eventually achieved the goal of self-discovery. The characters Lydia and Anna serve as a pretext for Ursula, the protagonist. Their pursuit is the same; Ursula has achieved the final goal of self-discovery.

Emphasizing the constructed nature of gender R. W. Connell comments, “All forms of femininity in this society are constructed in the context of overall subordination of women to men. For this reason, there is no femininity that holds among women the position held by hegemonic masculinity among men (Connell, 1995, p.187). From this definition, we can understand that gender is constructed by society. All the forms of femininity held by masculinity in the society before 1960s, as a result, the feminist movement flourished in the British society. In case of Ursula and her character in *The Rainbow*, she is female by birth but she has not held any male masculinity because she knows the previous situation of women in her society. She fights bravely in the men’s world without taking support of parents as being masculine. Even she had no regrets for what she had done, she never forgave those who had made her guilty and she breaks relation with Anton. Connell also declares, “Masculinity is a

social position, a set of practices” (Connell, 1995, p. 81). I agree with his notion of masculinity that is a social position, a set of practices because the gender role is constructed by the society. Ursula was free; she declared that in her revolts there was no law for her. She existed for herself alone. Gudrun (sister of Ursula) was happy at home but Ursula was not. Gudrun was easy in her own house whereas Ursula was uneasy, unwilling to be herself or unable. So, Connell defines masculinity as “...simultaneously a place in gender, and the effects of these practices on bodily experience, personality and culture” (Connell, 2005, p. 71). From this definition, we can take masculinity as practices on bodily experience. My point is that a masculine position works as an individual way that is not only the property of male.

At first, when together with Anton, Ursula behaves like a traditional woman and when puts great emphasis on her appearance. She feels like behaving as traditional women do at the time and accepting the submissive role in the male dominated society later, she became unlike traditional women. So, the narrator assumes in the novel, “She [Ursula] would fight and hold her place in this state also, in the world of work and man’s convention”. (Lawrence, 1915, p. 406) This line means that she wants to hold her own place in the world of task and man’s world. She wants to create a separate identity in the British society. Ursula regards Anton as the Son of God and falls in love with him. During the romance with Anton, she is not satisfied with confining herself to romantic emotion. She gradually redefines her pursuit of spiritual fulfillment in the society and intends to develop herself into a self-responsible modern woman. Therefore, she begins to discuss social affairs with Anton including submissive role of female. As John Worthen points out, “Skrebensky [...] is at first the man limited by his abstention from self, submitted as he is to the power of established society ...” (Worthen, 1981, p. 22). During his discussion with Ursula, he argues, “I belong to the nation and must do my duty by the nation” (Lawrence, 1915, p. 309). Later on, Anton has gone to the war in South Africa. Nevertheless, Ursula has hatred for war because she gets to know the cruelty of the war. The narrator also articulates:

The good of the greatest number was all that mattered that which was the greatest good for them all, collectively, was the greatest good for the individual. And so, every man must give himself to support the state, and so labor for the greatest good of all. One might make improvement in the state, perhaps, but always with a view to preserving it intact”. (Lawrence, 1915, pp. 326-327)

As being a soldier of nation, Anton believes that a man is important to preserve the state and social welfare of all humanity. Therefore, Ursula refuses the marriage proposal of him. She could not want to stop her search for fulfillment. She has not hesitated to do anything. Similarly, said, “I believe there are many men in the world one might love – there is not only one man” (Lawrence, 1915, p. 411). After Anton goes to war, she

keeps a lesbian relationship with Winifred Inger who is independent and beautiful. They spend a period together very happily. Thus, the narrator says, “When they were in the room together [...] almost to the exclusion of everything else. Winifred Inger felt a hot delight in the lessons when Ursula was present; Ursula felt her whole life begin when Miss Inger came into the room” (Lawrence, 1915, p. 335). These lines prove that Inger is typical representative modern woman who supports female masculinity rather than femininity. The narrator himself also claims, “Winifred Inger was also interested in the Women’s Movement” (Lawrence, 1915, p. 341). That means she is conscious about women’s emancipation and right and she wants to develop the progressive status of female in a society. Inger encouraged Ursula to be free in her life. Similarly, she is also very conscious about women role and growth of their position.

Unlike traditional women, she does not confine herself to family and domestic affairs hence she is more exposed to the evils of British society. Ursula dismantles the so-called traditional role of femininity and her rebellion against traditions and conventions and her self-discovery makes her the exemplary. She is an independent self-responsible woman. The narrator utters:

Already it was history. In every phase, she was so different. Yet she was always Ursula Brangwen. But what did it mean, Ursula Brangwen? She did not know what she was. Only she was full of rejection, of refusal. Always, always she was spitting out of her mouth [...] and grit of disillusion she could only stiffen in rejection. She seemed always negative in her action that which she was, positively. (Lawrence, 1915, p. 437)

When we talk about the long history of women’s role, they are considered as passive, inferior, submissive, and object of men, etc. But Ursula wants to dismantle the so-called history of society, which has not given the space for female masculinity. It only emphasizes the femininity and submissive position of female. However, she creates new history in the British society by presenting herself as new woman. She always rejects the traditional history, which is constructed by society. Holderness argues that “The novel is a radical novel of criticism and protest against the value of Lawrence’s contemporary society” (Holderness, 1992, p. 52). Ursula wants to make her identity so different from other. She always thinks she should avoid her feminine qualities that make her weak in destination of her life.

In fact, femininity and masculinity are socially constructed that can perform both female and male. For instance, Ursula cannot take support of her parents in any difficult moment of her life. Even she does not feel any regret while she is breaking the relationship with Anton, her lover. It means that she is not passive woman. Later on, she knew, she is pregnant that time she also does not feel disappointed with her life. The narrator urges, “She [Ursula] made dreams of the new place she would live in where

stately cultured people of high feeling would be [...] with her, and she would live with the noble in the land moving to a large freedom of feeling” (Lawrence, 1915, p. 419-420). She has a dream to create a new place where she can live freely. So, she demands for change of her society. Since the beginning of human civilization, women are suppressed and oppressed by men and considered as the subordinate to men. However, Lawrence presents Ursula not like a traditional woman. She is a liberated woman because she can do whatever she likes. So, Evelyn J. Hinz expresses, “She [Ursula] really wants freedom from the compulsion [...] Liberation, freedom from pursuing the ideals of self-determination, individualism, and independence, the freedom that comes from the recognition” (Hinz, 1976, p. 25). These lines demonstrate that Ursula always wants freedom, self, determination, and independent. She is an independent woman who is not pathetic, submissive and inferior.

Lawrence projects Ursula as spokesperson of this novel. However, the narrator declares, “She [Ursula] was no mere Ursula Brangwen. She was Woman, she was the whole of woman in the human order. All-containing, universal, how should she be limited to individuality?” (Lawrence, 1915, p. 444). Thus, Ursula represents the whole of woman in the human order; she is an only one woman who is not limited only to her individuality. Her experience struggle, and revolution connect with other women that mean her demands for change is demand for all women. She is the spokesperson of all women. It can be claimed that one word can change the world likewise one-person can change the whole society of the world. For instance, Ursula is a single woman however she represents all women of British society. She wants to give the message for all women that they can revolt against the patriarchal ideologies and act like her. So, the narrator adds, “She [Ursula] wanted to go away, to be free to stand straight up to her own height” (Lawrence, 1915, p. 419). She is a woman who is determined for herself. She does not take any support for developing her life ahead. Without any support from the male counterparts, she can get success in her life and complete her mission. She can change the role of woman. She also gives the message for all women to live a free life like men. Therefore, she is a representative character of all women. Here, the narrator assumes:

She [Ursula] knew that soon she would want to become a self-responsible person, and her dread was that she would be prevented. An all-containing will in her for complete independence, complete social independence, complete independence from any personal authority, kept her dollishly at her studies. For, she knew that she had always her price of ransom – her femaleness. She was always a woman, and what she could not get because she was a human being, fellow to the rest of mankind, she would get because she was a female, other than

the man. In her femaleness, she felt a secret riches, a reserve, she had always the price of freedom. (Lawrence, 1915, p. 333)

As mentioned above, the statement illustrates what she wants in her life and what is the main goal of her life. She says, she wants to become self-responsible, completely independent. She needs to get price of freedom. She feels proud with her femininity and masculinity. Similarly, Evelyn J. Hinz claims, “She really wants is freedom from compulsion to strive after liberation, freedom from pursuing the ideals of self-determination, individualism, and independence, the freedom that comes from the recognition” (Hinz, 1976, p. 25). In this way, she is liberationist woman by nature. She really needs freedom and independence. Therefore, the narrator also insists that “Ursula passed from girlhood towards womanhood gradually the cloud of self-responsibility gathered upon her. She became aware of herself, that she was the separate entity [...] of an unseparated [...] that she must go somewhere, she must become something” (Lawrence, 1915, p.281). It requires that she must be gaining something in her life. She is very conscious of herself that denotes she identifies her goal, which she wants to achieve by dismantling the boundary of conventional world of society. She accomplishes the crossing the boundary of Victorian role of women as being a masculine woman. Her masculine role contributes for all the women to become masculine and strong.

In sum, Ursula thinks that she must have a place in the world as the narrator utters, “She [Ursula] must have her place in the working world, be a recognized member with full rights there” (Lawrence, 1915, p. 410). Here, we can understand that Ursula wants to make her own world and wants to recognize herself as an independent woman in the society. Later, she becomes more and more an inhabitant of the world of work. She works with intensity because she wants to exist. She is a woman who keeps her identity as an independent woman in the British society. When we talk about her relationship with Anton, the narrator expresses, “He [Anton] thought that, because the community represents millions of people, therefore it must be millions of times more important than any individual, forgetting that the community is an abstraction from the many, and is not the many themselves” (Lawrence, 1915, p. 327). Anton only gives priority for the community rather than the individual. He argues that the community represents millions of people. So, he does not care for his life and his love relation. He only thinks that the community and the nation. He does not give value for individual self and identity. In this case also, the narrator, “She [...] wanted to fight, to fight the whole world. And these two small hands were all she had to do [...] with” (Lawrence, 1915, p. 326). So, Ursula only fights for emancipation of women and equality of humans in the whole world. She thinks that she can do everything to live her own life

and get success. She does not hesitate to take action against men. She has her own vision of her life.

### Conclusion

In Lawrence's *The Rainbow*, Ursula performs like a man that stands for masculinity. So, we can figure out that she is a masculine woman. The researcher agrees with the view of Judith Butler that Ursula believes that women can also perform like men. Even the novelist tries to balance the relationship between male and female. Ursula has feminine qualities but her action shows she is a masculine woman. In this novel, she represents a masculine woman who acts like a man in the British society. The novelist gives justice for the women's role by presenting Ursula as a new woman who seeks her individual identity in the conventional world. She wants to create a new history by presenting herself as a modern woman. She dismantles the conventional world of women. She can do what man can do. She is a masculine woman. Masculinity and femininity reflect the identification of gender, which are not a separate issue of gender. Both males and females can exhibit masculine traits and behaviors. Exhibiting both masculine and feminine characteristics are considered androgynous. The researcher employs the notion of Halberstam's female masculinity in order to interpret Lawrence's novel.

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## Studying the Effect of Seed-layers of Zinc Oxide Nanostructured Thin Film for Liquefied Petroleum Gas Sensor Application

Gunanidhi Gyanwali\*

### Abstract

*Gas sensors are devices that can convert the concentration of an analyte gas into an electronic signal. Zinc oxide (ZnO) is one of the most important n-type metal oxide semiconductor which has been utilized as gas sensor for many years. In this work, ZnO nanostructured films were synthesized by a hydrothermal growth from ZnO seeds and used as a liquefied petroleum gas (LPG) sensor. At first ZnO seed layers were deposited on glass substrates by using spin coating method, then ZnO nanostructured were grown on these substrates by using hydrothermal growth method. The effect of seed layers of ZnO nanostructured on its structural, optical, and electrical properties was studied. These nanostructures were characterized by scanning electron microscopy, X-ray diffraction, optical spectroscopy, and sheet resistance measurement unit. The sensing performances of the synthetic ZnO nanostructures were investigated for LPG. XRD showed that all the ZnO nanostructures were hexagonal crystal structure. ZnO nanostructured thin film showed high sensitivity towards LPG gas. The sensitivity of the film is observed to increase with increase in number of seed layers. The sensitivity of the film was investigated by measured change in sheet resistance under with LPG gas.*

**Keywords:** Thin film; Gas sensor; Nanostructure; Hydrothermal growth.

### Introduction

To monitoring the air quality in city areas has become a priority due to the great amounts of pollutants released in the atmosphere which have a harmful effect on the human and animal's health and also on the vegetation [1]. Gas sensors are devices that can convert the concentration of an analyte gas into an electronic signal, and are an important component of devices commonly known as electric noses [2]. To detect pollutant gases different kinds of gas sensor have been developed. In the past eighty years, scientists have developed various gas sensors such as electrochemical sensors, catalytic combustion sensors, infrared sensors, and diffusion fuel cell sensors [2]. These sensors have large amount of application in chemical engineering, medical,

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agriculture, architecture and other fields. These are electrolyte-based potentiometric sensors for automobile exhaust monitoring and another important type of commercial sensor is the metal oxide semiconductor gas sensor, e.g. SnO<sub>2</sub>, which uses changes in resistance of the metal oxide to detect the low concentration of gases [2].

In this thesis work, we have developed and characterized the ZnO nanostructured thin film on glass substrate by hydrothermal method and used for LPG gas sensor application. For this work, at first we have deposited ZnO thin film on glass substrates and synthesized ZnO nanostructured thin film for different seeds layers. Then this sample is characterized by using different instruments.

### Methodology

Zinc acetate dehydrate was first dissolved in mixture of ethanol and di-ethanolamine (DEA) solution at room temperature. The molar ratio of DEA to Zinc acetate was maintained nearly 1.0 and the concentration of Zinc acetate was 0.6M. The solution was stirred at 60<sup>0</sup>C for 2 hours to get a clear and homogeneous solution which served as precursor. This solution was filtered through Whatman filter paper [4]. The prepared Zinc acetate precursor was dripped on to spin coated substrate. The spinning velocity of the substrate was more than 2500 rpm initially and then 3000 rpm for 40 seconds in order to spread the colloid on to the glass with uniform thin layer. The deposited film is heated at 400<sup>0</sup>C for 10 min. After that the same coating process is repeated for different 2 layers, 3 layers, 5 layers, and 8 layers to get uniform, transparent and conducting thin film of ZnO.

For nanostructure growth solution, Zinc nitrate hexahydrate [Zn (NO<sub>3</sub>)<sub>2</sub>].6H<sub>2</sub>O, hexamethylene-tetramine (C<sub>6</sub>H<sub>12</sub>N<sub>4</sub>) (A.R. grade) and DI water were used as starting materials and solvent respectively. Zinc nitrate hexahydrate and hexamethylenetetramine was first dissolved in DI water at room temperature. The concentration of Zinc nitrate hexahydrate and hexamethylenetetramine was 0.3M. The solution was stirred at 60<sup>0</sup>C for 2 hours to yield a clear and homogeneous solution which served as precursor. The precursor solution was filtered through Whatman filter paper [6].

Now, for hydrothermal growth, the prepared ZnO solution was taken into an air tight glass bottle. Then the ZnO seeds layer deposited substrates was immersed in precursor solution, which solution was taken into air tight glass bottle. Then that glass bottle was immersed into a preheated water bath at 70<sup>0</sup>C for different time duration such as 2hrs, 4hrs, 6hrs, 8hrs, and up to 10hrs. After cooling, the ZnO film were washed with de-ionized water several times, and then dried in air. The crystallinity of the ZnO films was determined by X- ray diffractometer. Optical transmittance was obtained using USB 2000 photonics spectrometer. The electrical properties were determined from

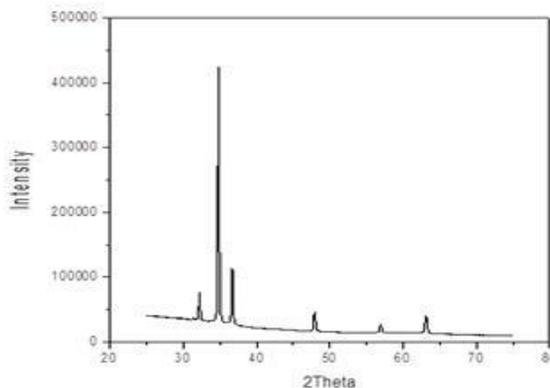
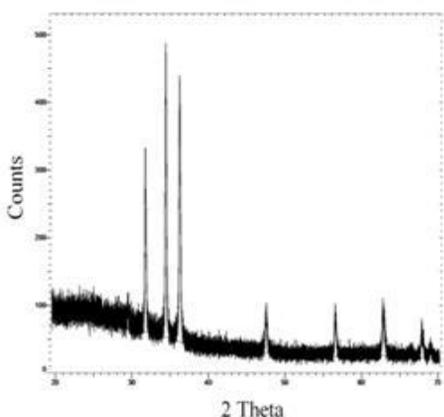
sheet resistance measurement. Morphology and dimension of the ZnO nanostructures thin film was studied by scanning electron microscopy (SEM). The LPG sensing properties were studied in a gas sensor assembly comprising a temperature controller, a chromel-alumel thermocouple, an electrical heating plate, a gas chamber, and a LPG volume measurement unit.

### Results and discussion

Here we study the structural properties of ZnO seed layers and ZnO nanostructured thin film on glass substrates. Typical XRD patterns of 8 coated ZnO seed layers are shown in Fig.1. From Table 1, we find that, the crystalline peaks with  $2\theta$  values can be exactly indexed to the hexagonal wurtzite structured ZnO (JCPDS card no 03-0891). The sharp diffraction peaks indicate the good polycrystallinity of the prepared films and no peaks for other zinc compounds are detected in the different pattern.

**Table.1.** JCPDS d-values, observed d-values, intensity measured for (hkl) plane ( $I_{(hkl)}$ ), intensity of (hkl) plane taken from the JCPDS card ( $I_{0(hkl)}$ ), and observed  $2\theta$  value of ZnO seed layers.

JCPDS(card no 03-0891)d-values ( $\text{\AA}^0$ )	Observed d-values ( $\text{\AA}^0$ )	$I_{0(hkl)}$	$I_{(hkl)}$	Observed $2\theta$ value
2.8000	2.8010	90	66	32
2.6000	2.5979	60	100	34.5
2.4600	2.4662	100	89	36.4
1.9000	1.9473	80	20	47.6
1.6300	1.6274	100	19	56.5
1.4800	1.4743	90	23	63
1.3800	1.3775	100	15	68
1.3600	1.3599	70	10	69



**Fig.1.** Observed XRD pattern of ZnO seed layers and nanostructured thin film (Hydrothermal growth for 10 hours).

**Table.2.** FWHM value ( $\beta$ ), grain size (D), intensity measured for (hkl) plane ( $I_{(hkl)}$ ), intensity of (hkl) plane taken from the JCPDS card ( $I_{0(hkl)}$ ), dislocation density ( $\delta$ ), d-values and texture coefficient ( $T_{c(hkl)}$ ) of ZnO nanostructured thin film.

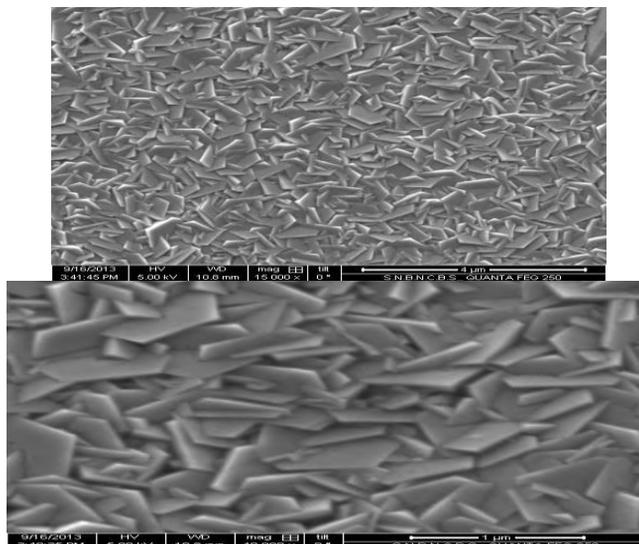
JCPDS (card no 03-0752) d-values ( $\text{\AA}$ )	Observed d-values ( $\text{\AA}$ )	Observed $2\theta$ -values	FWHM	D(nm)	$I_{(hkl)}$	$I_{0(hkl)}$	$T_{c(hkl)}$	$\delta/\text{nm}^2 \times 10^{-5}$
—	2.85	31.3	2.3	37	1.43	—	—	0.0073
2.7800	2.7781	32.19	0.169	511	11	100	0.40	0.382
2.5800	2.57624	34.79	0.1534	567	100	80	4.59	0.311
2.4400	2.44897	36.66	0.1761	496	27	100	0.99	0.406
1.8900	1.89792	47.88	0.2288	397	11	100	0.40	0.634
1.600	1.61675	56.90	0.205	460	5	100	0.18	0.472
1.4700	1.47342	63.09	0.2645	363	12	100	0.44	0.758

Texture coefficients of crystalline materials are calculated from the XRD result by using the relation [7],

$$T_{c(hkl)} = \frac{I_{(hkl)} / I_{0(hkl)}}{\frac{1}{n} \sum_n I_{(hkl)} / I_{0(hkl)}}$$

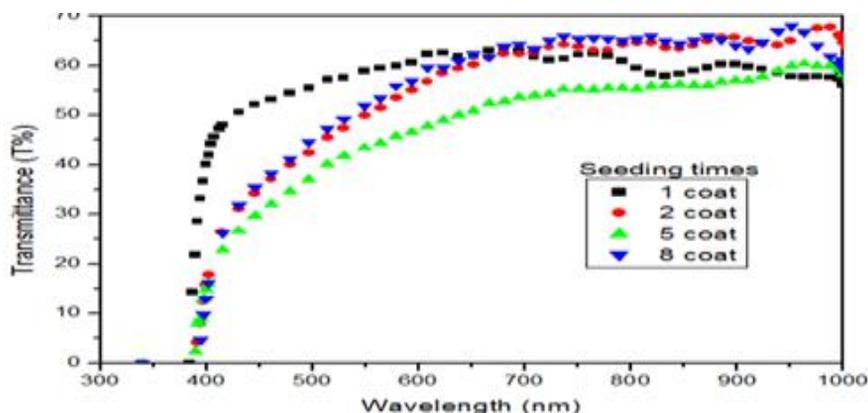
Where  $T_{c(hkl)}$  is the texture coefficient of (hkl) plane,  $I_{(hkl)}$  is the intensity measured for (hkl) plane,  $I_{0(hkl)}$  is the intensity of (hkl) plane taken from the JCPDS card (card no. 03-0752) fitting in the X-ray diffraction pattern material, n is the number of diffraction peak. The calculated texture coefficient values of ZnO nanostructures thin film for different (hkl) planes are shown in Table 2.

Further investigations on the dimension of the nanostructures, grown by hydrothermal synthesis were investigated by scanning electron microscopy (SEM).



**Fig.2.** SEM images of (8 coating) ZnOnanosheet synthesized by hydrothermal route for 2hours at different resolution (a)  $4\mu\text{m}$  (b)  $1\mu\text{m}$  resolution.

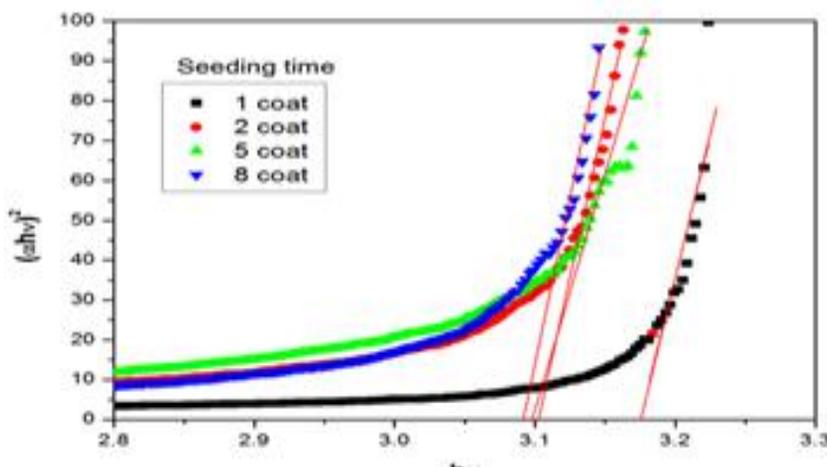
Fig.2. shows SEM image of ZnO film synthesized by hydrothermal route for 2 hours and Fig. 3 shows the SEM image of ZnO film synthesized for 10 hours. From this figure we find that nano sheet like structures were formed in both cases. The average dimensions of the nanostructures were measured based on the image. From figure the average thickness of plate like nanostructures was about 10 nm, which is slightly lower than the result of Shao et al. [8] and Li et al. [9]. From this image the average length and width of nanostructures is observed to be about 550 nm and 220 nm, respectively, which is also slightly lower than the values observed by different research group [10].



**Fig. 3.** Optical transmittance spectra of ZnO nanostructured films fabricated at  $70^{\circ}\text{C}$  for different seed layers.

Fig. 3. shows the transmittance of the ZnO nanostructured thin film fabricated at 70°C for different seed layers. From Fig. 4.10 we have calculated the average transmittance of the film, in the wavelength ranging from 300-1000 nm. The average transmittance was observed to be different for different coat. The average transmittance of the film for 1, 2, 5 and 8 coats of seed layer is observed to be nearly about 60%, 65%, 50% and 65% respectively. From the Fig. 8, it is clearly observed that in all case the average transmittance is observed to be less than 65% in the wavelength range 300-1000 nm, regardless the seeding layer. When the deposition condition like substrate temperature and other chemicals are kept fixed the value of transmittance changes according to change in the seeding time. From the graph it is observed that transmittance starts to decrease rapidly at lower range of wavelength.

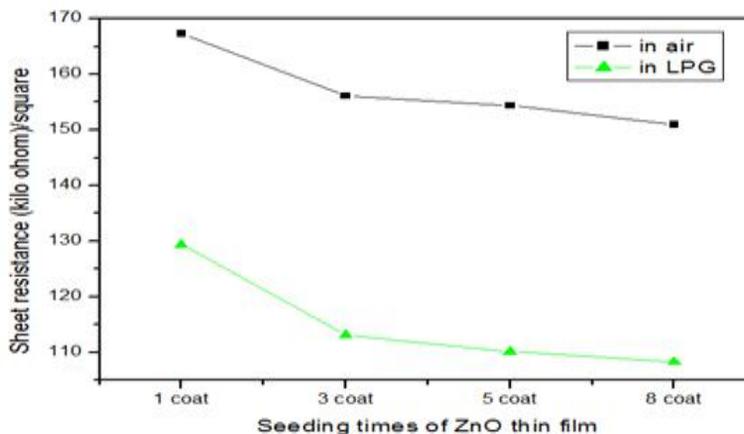
Fig. 4. below depicts the variation of  $(\alpha h\nu)^2$  versus photon energy ( $h\nu$ ) film prepared at same growth time, but have different seed layers of ZnO nanostructured thin film. From the figure we see that the allowed direct band gap decrease from 3.175 eV to 3.092 eV with the increase the seed layers. The band gap is observed to be 3.175 eV for one coated sample, but for 2, 5 and 8 coated Sample have nearly about 3.092 eV.



**Fig. 4.**  $(\alpha h\nu)^2$  as a function of photon energy ( $h\nu$ ) for the ZnO nanostructured thin film at 70°C for different layers of coating.

From the figure the band gap is observed to decrease slightly with increase in seed layers. Although many factors influence the variation of energy band gap, in our case the energy band gap decreased with increase of coating times of seed layers may be due to the increased in thickness of nanostructured film. For higher number of coating times of seed layers, the thickness of the film may be increased, due to this band gap may be decreased.

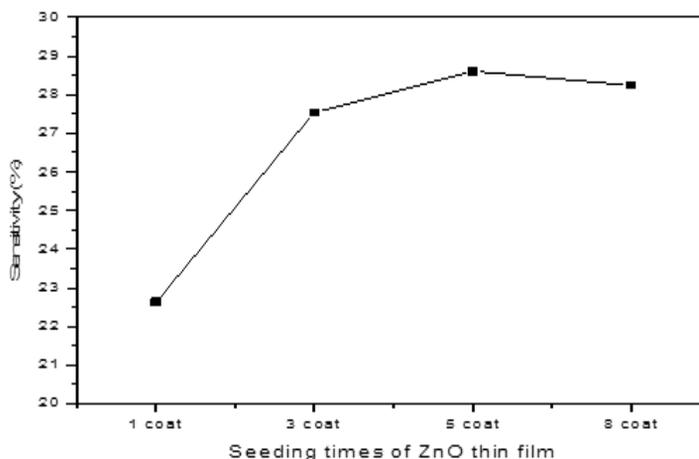
We have measured sheet resistance in air as well as in presence of LPG gas by using four-point probe methods operating at temperature of 300°C. Fig. 5. shows the sheet resistance of ZnO nanostructured thin film versus with different layers of seeding in air and LPG flow condition.



**Fig.5.** The sheet resistance of ZnO nanostructured thin film at different number of coats of seed layers in air and in LPG flow condition.

The continuous gas flow rate was 16.66 ml/sec for each sample. In both case the sheet resistance of the film is observed to be decreases rapidly with seeding time up to 3 coats. Beyond this the sheet resistance decreases slightly up to 8 coats. The sheet resistance of the film in air for 1, 3, 5, and 8 coats (for hydrothermal growth at 8 hours) is found to be 167, 156, 154, and 151 kilo ohm/square, respectively. Similarly, the sheet resistance of the film in LPG flow condition is observed to be 129, 121, 114, and 108 kilo ohm/square respectively. There are many factors that influence the decreases in sheet resistance with increase the number of coating of seed layers. In our case the decrease of sheet resistance may be related to the number of metal centers increased. Because with increase the number of coating of seed layers the number of nuclei of metal centers increased, and the film formed become denser and compact as number of coating increases. For small number of coating, the connection between grains may be loose and thus film appears to be porous. With the increased number of coating, the films become denser. So that sheet resistance decreased with increase in seeding times. This decreases value of sheet resistance with increased number of coating is applicable to observed high sensitivity.

Fig. 6. shows the sensitivity versus number of coating of seed layer of ZnO thin film at temperature 300°C obtained by hydrothermal growth for 8hrs.



**Fig. 6.** Sensitivity versus different number of coating of ZnO thin film.

From the figure we see that sensitivity of the film increases rapidly with increasing the number of coating of seed layer thin film up to 3 coats, beyond this the sensitivity increases in slow rate. This is because for small number of coating, the connection between grains is poor and thus the resistivity is high. The sensitivity of ZnO nanostructures thin film fabricated at temperature 70°C for 1, 3, 5, and 8 coats (having same growth times) are found to be 22.63%, 27.54%, 28.61%, and 28.24%, respectively. The Fig.11.reveals that the response range of sensor is from 22.63% to 28.24% for the different coat of ZnO thin film at gas flow rate 16.66 ml/sec, with continuous flow of LPG gas. In our case sensitivity increased with seeding time may be due to larger surface area of nanostructures. For small number of coating, the connection between grains is loose and thus film appears to be porous. With the increased number of coating, number of grains increase thus increasing the surface area of film. So it is obvious that for the greater surface area, the interaction between the adsorbed gases and the sensor surface are stronger. So that sensitivity is increased with increasing number of coating of seed layers. On increasing the coatings further, the grains tend to overlap on others thus not contributing much in increasing the surface area. So we obtain a less steep curve for the 5 coated ZnO seed layer. The decrease in sensitivity for the 8 coated ZnO seed layer can be attributed to the same reason that the overlapping of more grains with increased number of coatings tend to decrease surface area significantly. From our observation we observed maximum sensitivity for 5 coated seed layers of ZnO.

### Conclusion

In this work, ZnO nanostructures were synthesized by a hydrothermal route from ZnO seed layers. The effect of the different seed layers of ZnO nanostructured thin film were studied. XRD showed that all the ZnO nanostructures were hexagonal wurtzite structure. SEM revealed that the length and width of ZnO nanostructure increased with increase in growth time. Band gap for ZnO nanostructured thin film decreased from 3.175 eV to 3.092 eV for the increasing seed layers while the sensitivity for the same samples increased. The sensing performance of the ZnO nanostructures was observed with LPG in air. The sensitivity of ZnO nanostructures was observed to be 22% to 28% with different seed layers.

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## Voice of Protest in Nepali Poetry by Women

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### Abstract

*This article explores feminist voice in selected poems of four Nepali female poets. They are: "Ma Eutā Chyātieko Poshtar" ["I, a Frayed Poster"] by Banira Giri, "Pothī Bāsnu Hudaina" ["A Hen Must not Crow"] by Kunta Sharma, "Ma Strī Arthāt Āimai" ["I am a Female or a Woman"] by Seema Aavas and "Tuhāu Tyo Garvalai" ["Abort the Female Foetus"] by Pranika Koyu. In the selected poems they protest patriarchy and subvert patriarchal norms and values that trivialize women. The tone of their poems is sarcastic towards male chauvinism that treats women as a second-class citizen. The poets question and ridicule the restrictive feminine gender roles that limit women's opportunity. To examine the voice of protest against patriarchy in the selected poems, the article takes theoretical support from French feminism, though not limited to it. The finding of the article suggests that Nepali women have used the genre to the political end, as a medium to advocate women's rights.*

**Keywords:** Patriarchy, feminism, feminine, male chauvinism, and gender roles.

### Background

In the history of Nepali feminism, poetry is the first mode of expression used to protest patriarchy and subvert the norms and values that discriminate women. The first unified protest against patriarchy was launched in the 1940s, during the Rana Regime by Yogmaya and her followers. A social reformer and activist, Yogamaya has been acknowledged as one of the precursors of feminism in Nepal. She protested the prevailing gender discrimination, caste discrimination and corruption in the contemporary Nepali society. Aziz (2001), a feminist anthropologist has introduced her as a poet, teacher and insurgent, who "advocated social reforms for equality for women" (p. xxvi). Yogamaya would compose verses with political messages and recite them to raise consciousness among the mass about male chauvinism. As she would recite: "I am the child in your lap./ You are the babe in mine;/ there is nothing between us, nothing at all./ Your eyes have tears, just like my own" (translated by and quoted in Aziz, 2001, p.

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33). She insisted that all human beings, both males and females are equal for they share the same emotions and feelings. Thus, they should have equal rights. As a mode of expression, poetry helped her raise consciousness among the mass and then protest the perpetrators.

In the then closed society, where women could not raise their voice against child marriage, polygamy and sexual violence against women and claim women's reproductive rights her method was effective. Aziz (2001) compares her activities with the Western feminists' activities in the 1970s:

Yogamaya's anti- Brahmin campaign is more comprehensible if we compare it to the call of contemporary Western feminists for consciousness raising . . . The 1990s feminist's women taught that exploitation was not the action of single men, but derived from a system in which women and men were embedded. (p. 50)

Yogamaya reasoned that the political, social and cultural systems of the contemporary society should be changed for the creation of just and discrimination free state.

Demanding the establishment of *Dharmarāja* (a just state) she dispatched appeal for justice to the then ruler of Nepal Juddha Shamsheer Rana (1929- 1932).

Ever since Yogmaya, other Nepali feminist writers, too, have been using poetry as a medium of expressing their frustration and anger against patriarchy. Poetry as a literary genre has become a powerful means for the Nepali women to explore their experiences as well as a medium to question and correct societal ills. They use images and symbols that are subversive to patriarchal norms and values. Poets like Parijat, Banira Giri, Kunta Sharma, Sarita Tiwari, Seema Aavas, Pranika Koyu and others have written poems that contain political messages. They are sarcastic towards the system that defines women as the 'second sex' or the objects for men's pleasure. For these poets, poetry is not a mere medium, a literary genre to explore emotions and feelings but an endeavor to engage oneself in exploring various sorts of dominations directed towards women. So I have chosen four poems composed by the four different poets to analyze the voice of protest against patriarchy in their poems. The poems are: "Ma Eutā Chyātieko Poshtar" ["I, a Frayed Poster "] by Banira Giri, "Pothī Bāsnu Hudaina" ["A Hen must not Crow"] by Kunta Sharma, "Ma Strī Arthāt Āimai" ["I am a Female or a Woman"] by Seema Aavas and "Tuhāu Tyo Garvalai" ["Abort the Foetus"] by Pranika Koyu. In the process of analysis, the article seeks answers to the following research questions:

1. How do the selected poems subvert patriarchy?
2. Why do the poetic personas of the selected poems protest patriarchy?

The article aims to examine the voice of protest against patriarchy in the selected poems from these different poets. It argues that these poets use parody and satire to subvert bias patriarchal norms and values.

### Methodology

The qualitative mode of research has been adopted to analyze the selected poems that form the primary source of information for the study. Among the four poems I use the English version of Giri's "I, a Frayed Poster" and Koyu (2017)'s "Abort the Female Foetus" whereas other two poems are available only in Nepali version. So, I use my own translation, based on free translation of the extracts taken from them. The relevant extracts from the poems are analyzed and interpreted from the French feminists' perspectives. It primarily takes insights from Helene Cixous and Julia Kristeva. The common ground between them, as suggested by Jones (1981) is:

All analysis of western culture as fundamentally oppressive, as phallogocentric. Symbolic discourse (language in various context) is another means through which man objectifies the world, reduces it to his terms, speaks in place of everything and everyone else- including women. (p. 87)

They believe that language in general is patriarchal; it is phallogocentric that prefers phallos and treats male and masculinity as superior to female and feminine. Thus, they demand that women should resist patriarchal discourse.

Kristeva (1988) purposes the use of pre-linguistic, pre-oedipal language, which she terms as 'semiotic' in place of the 'symbolic', the father controlled language. She has defined 'semiotic' in relation to the child's language, which s/he speaks in her pre-oedipal phase. She insists that the 'semiotic' language is associated with the female body whereas the 'symbolic', which the child learns as s/he grows, is associated with the 'law of the Father'. (p. 239). The 'symbolic' censors and represses the 'semiotic' for it is threatening to patriarchy. Thus, she suggests that women should adopt 'semiotic' mode of language to protest patriarchy.

Similarly, Cixous (1997) argues that women's place in the history of Western thought, which is phallogocentric, has been at the negative pole of binary oppositions like father/mother, sun/moon, culture/nature, day/night, activity/ passivity and so on. These binary oppositions, she posits, have structured that history. She explains that all of the couple "come back" to the couple "man/woman," and also relate to another couple like philosophy/literature. All these pairs show the feminine side negative and powerless (pp. 287-88). She claims that women must reject this mode of thinking; and they can reject patriarchal thought by writing themselves. She adds if women are to write themselves they have to create feminine discourse. She connects feminine language with female sexuality, which transgresses the masculine logic. Both Cixous (1997) and Kristeva (1988) have identified women's writing as a mode of resistance against patriarchy.

To examine women's protest against patriarchy as manifested in the selected poems I draw insights from the logic of these feminists. However, in the process of justifying my claim I draw from other feminists as well.

### Review of Literature

Reviews on Nepali literature by women are very scanty. Like other patriarchal countries, in Nepal also women literature is on the margin. Most of the critics of Nepali literature are males and they dismiss women literary creations as feminists' grudges. Manjushree Thapa, a writer and critic, deplors the near-invisibility of women in Nepal's thoroughly men-centric literary world. Dr. Archana Thapa, who has been running the publishing house Akshar Creation to support writers from the margin, especially women, mentions that women writings have been undervalued by the male readers/ critics who believe that women's writings consist women's grudges, frustration and complaints. They use a derogatory term "nārībādīruilo" ["feminist grudges"] to refer to women's writings and dismiss the worth of women's experiences (quoted in Mishra (2020), Para 4). For instance, the anthology, *Dancing Soul of Mount Everest* includes 308 modern Nepali poems of 135 poets, out of which the number of female poets is 16. It also supports the marginal position of Nepali female poets.

Evaluating the poetry of Banira Giri, the editor of the aforementioned anthology, Momila (2011), a Nepali poet and critic claims that she writes "advocating for women's esteem and human values" (p. 155). Likewise, she observes that Kunta Sharma raises a feministic voice in Nepali verses, projecting her stiff polemics against the male-dominated social set-up (p. 159). Walsh (2019), a researcher points out that Nepali woman poets mostly "write of domestic oppression, the pressure to marry, and a society that devalues them at almost every stage of their lives" (p. 7). He has analyzed the motives of protest in Nepali poetry by women. He, too, complains that "There has been little scholarly interest specifically in Nepali protest poetry, and even less academic research into poetry by Nepali women" (p. 8). According to him, Banira Giri though "largely dismissed and undervalued by a country that was not wholly appreciative of women who engaged in independent expression (p. 43) exposes the ways in which Nepali women are pressured into subservient roles from birth.

Analyzing the poetry of South Asian women, Manjushree (2014) posits that they "have been considering poetry as a subtle site to showcase the insensitivity and indifference of dominant power politics in assigning passive roles for women" (p. 213). She identifies Giri as an "authentic voices from Nepal" and claims that Giri's poem "'Woman' examines different and extreme attitudes of men towards a woman ranging from the most revered one to the most stereotypical." She adds that the poem "mirrors multiple moods of men towards women in any society where woman is worshipped or

commodified, glorified or dismissed as inactive participants of hegemonic power" (p. 214). Indeed, Giri is critical towards the patriarchal mindset that objectifies and demeans women.

Critics and Reviewers on Nepali poetry, in the list of representative Nepali poets have provided space to Banira Giri as one of the representative Nepali poets among the four poets. The other three receive less attention from the critics. Though critics briefly mention the individual poet and hint the feminist message in their poetry they limit from making detailed analysis of their poems. This article aims to fill this research gap by analyzing the four poems of these poets. Giri and Sharma belong to the first generation of woman poets from Nepal whereas Aavas and Koyu, as emerging woman poets from Nepal, represent the third/present generation. In this regard, the article will be beneficial to the researchers who want to trace the trend and tradition of Nepali poetry by women.

### **Voice of Protest in the Selected Poems**

Written in the tradition of protest poems, in the selected poems the poets raise their voice against gender discrimination practiced in a patriarchal society like Nepal. Aestheticism and activism go together in their poems. Pointing to the need of activism for women, Sarita Tiwari, a Nepali poet and activist suggests that each and every woman who wants freedom and emancipation should actively engage in politics. Without being a feminist, she reasons, a female cannot liberate herself from the shackles of patriarchy (para 17). Koyu (2019) agrees that unlike patriarchy, feminism believes on equality and it is empathetic towards others. She shares that she deliberately uses feminism in her poems. As she reasons:

I did consciously start writing from a feminist lens from 2002. I feel like if anyone is concerned with injustice and autocracy of the state and wants to raise the voice against it, then, feminism is the lens that helps you probe further inside it because unlike patriarchy feminism does not worship power, it teaches you empathy which is an important aspect of any rights activist. And most importantly, one does not have to be apologetic to choose the lens befitting their philosophy to analyze their society, and to write and talk. (para 5)

The feminist voice emanates from her conscious effort. She is intolerant towards the state's indifference towards the injustice heaped upon women in the Nepali society. Being intolerant towards the state's inactions towards the miseries of women in Nepali society, she expresses her anger and frustration towards the patriarchal Nepali society. The tone of rage and hatred against the stakeholders, who are mostly the men, manifest in her poem "Abort that Foetus." Koyu (2017) being angry towards the miserable condition of Nepali women suggests them not to marry. She argues even if they marry they should not become mothers:

All the stories about girls that I now read in the papers/ all I learn of their calamities and misfortunes-/ When I deserve the dispiritedness of the state, / the cowardice of those who are related/ the commerce of those who are unrelated, / with great sorrow I affirms/ my vow never become a mother. (p. 141)

Like in other patriarchal societies, women in Nepali society are defined as the second class citizen and are denied their human rights. A woman's body is reduced to an object for men's pleasure. Women and even minor girls are routinely raped and murdered but the perpetrators are rarely punished. The daily newspapers of the nation make the headline news about girls being raped and murdered. But the government fails to punish them. It seems that girls are fated to be raped and murdered. The persona cannot stand this. So being helpless she affirms her vow not to be a mother.

Though the poetic persona reaffirms her vow not to be a mother one needs not interpret the meaning of the poem on the surface level. The tone of the poem is anger and frustration. She is frustrated by the stakeholders' apathy towards women plight in the nation. She critiques the inaction of the government that promotes impunity in the nation. But the rulers of the nation turn their blind eyes to the victimization of women in the hands of men. Being helpless she suggests women to abort the female foetus. Likewise, she challenges patriarchy that denies women's right to their body. If women are to be raped, tortured and murdered on the daily basis why deliver a baby girl, she questions. Her question transgresses the masculine logic based on hierarchy which prefers values associated to males and masculinity and despises those associated to females and feminine. Cixous (1997) suggests that women should transgress the male's logic (p. 287). Koyu (2017), too, transgresses the logic that insists that women must not make sex selective abortion. As she commands women to abort the female foetus: "Marry if you wish, do not have children/ if you give birth check the foetus-/ is it a daughter or a son? /and if it should be a daughter, then kill it/ abort your daughter's foetus" (p. 141). She is straightforward and suggests that women should abort their daughters' foetus.

The persona of the poem is sarcastic towards the belief that reveres motherhood but kills the female foetus. Though sex selective abortion is outlawed, it has been widely practised in Nepal. The corrupted, greedy people who trade women's body are involved in it. The speaker's disobedience to the law approves the disobedience of the 'Law of the Father' by the 'semiotic' found in Kristeva's theory (p. 239). The speaker's assertion subverts the double standards of Hindu Nepali society. One the one hand motherhood is highly valued and daughters are worshipped as the Goddess Laxmi, but on the other hand the mother is not allowed to deliver the baby girls. Similarly, girls are raped and murdered. She crudely exposes the bitter reality of patriarchal Nepali society.

Likewise, Sharma (2011) parodies and makes fun of the patriarchal mindset that silences women's voice and deprives them from knowledge and power in her poem "Pothī Bāsnu Hudaina" ["A Hen Must not Crow"]. In the Nepali society the proverb 'pothī bāsnu hudaina' [a hen must not crow] is commonly used to discourage women from being vocal and assertive. Being assertive is a masculine activity and it does not suit to a woman. Being bold, assertive and commanding women invite misfortune on them. Superstitious people believe that if a hen crows it is a sign of bad omen. Thus, it should be beheaded. It is against nature for it is the rooster's business to crow confidently. In the Nepali society, to mute the vocal and assertive women, they say 'pothī bāsnu hudaina.' If she does, she will meet the corporal punishment which may lead her to death.

Sharma (2011) is sarcastic to the culture that demands women to be silent and submissive and limits them to the feminine roles. Mukherjee (1978) summarizes the expectations of Hindu women as to be "prepared for domestic life, to be patient, obedient, and submissive to their husbands." (p. 145). Sharma (2011) subverts the patriarchal tendency to limit women to the aspects of reproduction like delivering the babies and nurturing and caring them. But she does not protest directly as the poetic persona approves:

It is the rooster's job to crow/ All the time raising its neck, on the top of the roof,  
in the front yard, in the veranda, on the compound wall/ it is the rooster's nature  
to raise the voice/Only the hen has to cackle/ Is forced to swallow anguish /Lay  
eggs and sit on them/Hatch the chicks and with care/Raise the fledglings. /  
Should not burst into laughter /If a hen crows, behead her! (0:16-0:48)

Women should ascertain the secondary and subservient roles assigned to her. If they resist playing the roles and aim to cross the boundary drawn to them they will suffer hostility. "When considering the risks involved for a Nepali woman to put her head above the parapet, it is hardly surprising that many may seem, on the surface, accepting of their role of subservience. The alternative can be far more dangerous" (Walsh, 2019, p. 112). The proverb 'a hen must not crow' then is a reminder to women to act feminine. And the poetic persona also approves that 'a hen must not crow.'

Women in patriarchy need to affirm feminine gender though they are disadvantageous and demeaning to them. According to Butler (1999) one demonstrates his/ her gender depends not on the personal choices of the individual rather one performs gender roles "within cultural situations or as a response to a set of norms." Individuals' "agency is constrained by culture and what I can do is, to a certain extent, conditioned by what is available for me to do within the culture and by what other practices are and by what practices are legitimizing" (p. 345). In Nepali society,

especially in orthodox Hindu community women should demonstrate shyness and remain silent and submissive. If they protest and demand, they will be punished.

Though Sharma's poetic persona seems to confirm the patriarchal expectation from women, as she agrees that 'a hen must not crow, she should only cackle and hatch the eggs,' the tone of the poem is sarcastic. She uses parody and ridicules the culture that compares women with the female animals and limits her to nurturing, caring and doing the domestic chores. The message of the poem is overtly political. The speaker denies playing the subservient role and asserts her agency as the subject. She claims that she is a rational and conscious being like the men and she wants to break through the darkness to knowledge.

Aavas (2016) in her poem "Ma Strī Arthāta Āimāi" ["I am a Female or a Woman"] also subverts the traditional notion of femininity attached to women. She rejects the treatment of women as 'second class citizen.' From the traditional perspective, a daughter is seen as a burden for her parents. She is taken as other's property. So, people in general, despise having baby girls. They despise women's body as it is no use for the parents. Women are demeaned as *aimāi* who is destined to serve others. But the speaker of the poem, sees her woman body not as her weakness, but as strength. She accepts her identity as *aimāi* positively to refer to woman as a creator, the most superior human being. She approves her identity as *aimāi* in her interview with Bhattarai (2017, para 4). It is used to refer to the middle aged women and celebrate womanhood. It is a satire to men who prefer young women.

Breaking the taboo attached to women's body Aavas's speaker speaks the unspeakable. She appreciates the cyclic nature of female body and feels jubilant when she menstruates: "I smiled touching the ground woken by the wave/ smiling like a full moon in the pond" (p. 11). It defies the orthodox Hindu norm that treats menstruating blood as dirt and isolates menstruating women so that the house remains pure. She also subverts the culture that discourages women from talking about their bodies. In her subversion of patriarchal norms associated to female body she aligns to Cixous (1976), who critiques patriarchy for this: "Men have committed the greatest crime against women. . . . They have made for women an ant narcissism" (p. 878). Women in patriarchy feel inadequate for they have internalized the belief that female body is worthless. But the poetic persona discusses her womb, the ovary, the vagina and the breasts as parts of the reproduction process. She claims that because of these organs the human creation is possible. Her admirations of the private parts of women breaks the taboo attached to them.

Aavas feminist stance reveals in her understanding of women's suffering in patriarchy and her protest against it. The speaker warns patriarchy not to kill the female foetus looking between her legs:

Just let me step on the ground. /From my cleavage another world may be born /  
let me walk across the darkness to see the light. / From the corner of this very  
world walking on my own foot/ May come another young age. (p. 43)

She condemns the use of technology that people use to detect the sex of the foetus and abort the female foetuses. She claims that if females are allowed to be born and gain knowledge they will create their own world destroying the age-old patriarchy.

Giri (2011), too, protests patriarchy in her "I, a Frayed Poster." The image of a torn poster is used in the poem to show the omission and misrepresentation of women in the myths. Men construct the myth to create and circulate feminine stereotypes that annihilate women's existence. Some Hindu and Kirat myths treat women as the shadows of men who have no existence beyond their husbands:

Man, do not vary the meanings you give/ to pieces of splintered sentences, /I  
have forgotten my story.

Beside the fireplace in the dead of winter, / an old man tells the children a tale:  
Parohang and Lempuhang descend/ and from the old man's eyes it seems/ he is  
the Shiva of some era, who has lost/ the goddess Sati in Dacha's sacrifice  
He tells the story of Lal and Hira; he chases Lal away on the white horse/of  
centuries ago, / hose hooves still issue/ their orders to the ears of Time./ How  
helpless, those men, we men, that old man telling stories. (p. 156)

Through the extracts she denounces the myths that are created by men, narrated by men for men. She is sarcastic that men are so helpless that they have to create a false image of women to support their domination on women.

Through these myths men repeat the same story of women for generations. Giri compares the men's tendency of repeating the same story about women with a poster that has been torn because of men writings over it repeatedly. As the generations of men write over the same poster it has been torn and the message of the posture is illegible. The image of torn poster is used to show the history of women that have been obscured as men repeat the same myth about women for generations. Listening to these myths created by men women are so confused that they have already forgotten their identity. Through these myths women are made to believe about their submissive and subservient roles. The speaker suggests the notion of femininity is "a cultural construct" (Moi, 2000, p. 144) created by men to dominate women. Simone de Beauvoir claims that "one is not born, but becomes one" (quoted in Moi, 2000, p. 209). So the persona, also accepts her secondary position to men like the Sati and Parohang and Hira in the myths.

The metaphor of a frayed poster in the title of the poem stands for women in patriarchy who have been wrongly portrayed in the myth created by and circulated by men. The false images of women perpetuated by these myths have obscured the real

image of women. So she challenges the patriarchal identity attached to women. The speaker asserts: "I am a torn poster on the wall of Time, / Man, do not vary the meanings you give/ to pieces of splintered sentences: / I have forgotten my story" (Giri, 2011, p. 157). Because of performing and acting the role given by men, women are used to with it. Indeed, they have forgotten to live the real life like that of human. She sarcastically asks men not to change the 'meaning you give me.' But indirectly she protests the stereotype femininity created and perpetuated by men to maintain their power and status quo.

Giri's satire to patriarchal myths shows her feminist stand. Kristeva questions, "What can 'identity,' even 'sexual identity,' mean in anew theoretical and scientific space where the very notion of identity is challenged" (quoted in Moi, 2000, p. 214)? Feminists believe that myths are written by men for men to sustain men's domination on women. Since women were not in writing occupations they were wrongly portrayed. Thus, to protest the omission and repression of women, Cixous (1976) calls women to writings:

We've been turned away from our bodies, shamefully taught to ignore them, to strike them with that stupid sexual modesty. . . . Women must write through their bodies, they must invent impregnable language that will wreck partitions, classes, and rhetorics, regulations and codes. (p. 886)

Cixous (1976) suggests women to break the low, subvert the logic of 'truth' and write their own history. She posits the need of women's writing, "women should break out of the snare of silence" (p. 888). These women poets also through their writing subvert the patriarchal norms and values that silence them. They challenge the rhetoric of phallogocentrism.

### Conclusion

The analysis makes it explicit that these poets use images and symbols to subvert patriarchal norms and values. The poetic personas of the poems question and ridicule feminine stereotypes attached to women. The poets use parody and humor to expose the double standards that exist in patriarchy and question the subservient and dependent roles assigned to women. They disclose the inherent biasness that exists in the patriarchal mindset. The poetic persona of Sharma's poem makes fun of male chauvinism that compares women to the hen. Koyu's speaker is also furious to patriarchal hostility towards women. She disobeys the law and orders women to 'abort that foetus', if women have to suffer throughout their life. Aavas, too, challenges the taboo attached to female body. She rejects traditional femininity assigned to women. Similarly, Giri is sarcastic to the secondary position assigned to women. The condition of men is so vulnerable that they create myths about women and circulate them to

sustain the status quo. The personas of the selected poems ridicule and object the tradition that treat women as objects for men's needs and pleasure. They protest patriarchy for it is hostile to women. The tone of these poems is protest and the poets impart feminist message through them.

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# Governance of Health Care Services: A Critical Understanding of Federal Experiences from Central Nepal

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## Abstract

*People in different locality interact, perceive, and experience the government and governance through the government's various service delivery mechanisms mainly, which affect them in their locale. Governance in the health sector can serve as an essential and critical window through which we can glance at the situation of governance in a given society. Multiple voices from the actors involved in delivering health care services and health service users portray the current emerging situation of health governance, especially, during the initial years of implementation of federal system in Nepal. In portraying the current health governance scenario in the study areas, this article shows how people's experience of forms of governance affects their uptake of health care services. It uses micro-level ethnographic information to look at the broader issue of health governance.*

**Keywords:** Health Governance, Infrastructure, Ethnography, Federal System

## Introduction

People in different locality interact, perceive and experience government and governance through various service delivery institutions and mechanisms of the government machinery mainly, which affect them. Understanding health sector governance at the local health facilities provides an opportunity to explore how it has been translated into practice. Good governance is one of the six constituent parts of a health system that can contribute to strengthening health services delivery (WHO, 2010). World Health Organization (WHO, 2017) emphasizes that good governance is essential to promote and maintain population health in a participatory and inclusive manner.

This paper sheds light on how actors involved in delivering health care services, the citizens supposed to utilize them, and the institutions through which they are provided understand, practice and, experience government from their respective

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locations. In doing so, this article focuses on examining how far the prevalence of inclusive governance, which promises to incorporate diverse voices, and to bring decision-making closer to citizens (Hinton, 2011), has been translated in the study area. Moving beyond the conventional model of measuring health care delivery only in terms of input and outcomes (Lewis and Pettersson, 2009), this paper has accommodated and paid attention to governance in the health service delivery system to know how well the system is operating and its effectiveness in terms of service delivery. In line with Lewis and Pettersson, this article deals only with some aspects of five general indicators to measure the performance of health care delivery: budget and resource management, individual providers, health facilities, informal payments, and corruption perceptions. Through the article, it is aimed to critically analyze how far federalization process has helped to strengthen the capacity of the Government of Nepal (GoN) to deliver health care services closer to its citizens.

Following the federal system, health facilities at the local level are running as part of and under the local level bodies. One of the main aims of this paper is to comprehend how the federal process has unfolded in the health sector and how far it had addressed the significant dimensions of governance, viz. the rule of law, representation, participation, transparency, and accountability. To get into that, the second objective of the paper is to grasp the experience, factors, perceptions, and meaning embedded with the unfolding process of federalization, from the perspectives of the actors and stakeholders involved in delivering health care service within this short period of federal governance.

Relating governance with performance, Lewis and Pettersson (2009) argue that good governance enhances performance in health care delivery whereas poor governance disproportionately affects the poor. For Dodgson, Lee and Drager (2002, p. 6), “health governance concerns the actions and means adopted by a society to organize itself in the promotion and protection of the health of its population”. Either formal (e.g., Public Health Act, International Health Regulations) or informal (e.g., Hippocratic Oath) rules may define such organizations and their functioning to advise or ban behavior. Health governance mechanisms can be located at the local, national or global level. They argue that historically the base of health governance has been at the national and subnational level, reflecting the primary responsibility of the government for the health of their people.

Some scholars and institutions have pointed out the potential hurdles on the way to realizing good governance. Analyzing how Indian bureaucracy works up to the community level, Gupta (2012) states that everyday bureaucratic practices systematically produce arbitrary consequences in its provision of care. The indifference to arbitrary outcomes has become the central feature of the state, emerging from the

workings of a supposedly highly rationalized, bureaucratic state. He regards such indifference through the production of arbitrariness as structural violence exerted by the state.

The Asia Foundation (TAF, 2015) has pointed out two prominent and interrelated challenges of governance at the local level in Nepal: politics matters a lot and informal matters more. For The Asia Foundation, the way politics is conducted in Nepal has degenerated governance practices and increased corruption at the local level. As the organizational basis of political parties, especially at the local level, is not ideology but political economy, they constantly use patronage networks and constituencies to maintain their size and influence. Informal ways have been the convenient paths for local bodies to plan, budget, and deliver services in a way that they will keep the local politics settled, while serving the interest of the political elites and the bureaucracy. Those who control the system find the informal as convenient and beneficial.

Health policies and plans have evolved through a long process in Nepal. Formulation of periodic development plans, which began in Nepal in 1956, has opened up the planned development in the health sector. The first fifteen-year long term health plan was developed in 1975. Sixteen years after the formulation of the first long-term health plan, National Health Policy (1991) has yet to emphasize to expand the availability of modern health facilities to the rural populace. By this time, health facilities have begun to display all the available health services on their signboards. It has also made the provision of free basic health services and drugs, whereas it could not pay attention to the unique needs of women, children, and poor and excluded groups. Second Long Term Health Plan (1997-2017) came with the promise of improving the health status of those whose needs had not met yet. It recognized poor and rural people, women and children, and marginalized and underprivileged people as vulnerable.

Engaging with existing literature on health governance, this introduction part of the article defines and highlights the health governance in Nepal. It also points out the research objectives and questions. The whole paper aims to bring out the answer for them. The second part of the article portrays the research methodology explaining how primary data were collated, which provided substance for this paper. Then, the article comes up with its main contents which comprise of discussions on the infrastructural base of the health facility, availability of services, provision and availability of human resources, and social audit and monitoring measures adopted in the locality. Finally, the conclusion part shows the form of health governance that has unfolded in the locality following the federalization in Nepal.

### Research Methods

This article primarily bases on information generated from an ethnographic study conducted in 2018 (May-December) and 2019 (April-May) at select health facilities and community in Gorkha district and in Rautahat district to understand how the governance has unfolded in the health care realm. The researcher himself conducted a micro-level research in Gorkha district and information generation in Rautahat was also supported by field researchers. Though this article comprises of information from these two field districts, however, it is not the aim of this writing to make comparative presentations of the study findings. The information from both the districts has been employed as and when they are regarded relevant to substantiate arguments.

The fieldwork was conducted in two municipalities, and at a rural municipality in Rautahat district and in one rural municipality in Gorkha district. Considering the sensitivity of information and to protect the human subjects involved in the research study, “ethnographic masking” (Murphy and Jerolmack, 2016) has been done to anonymize name of the municipality, organization, and staff. In case of need, the names of the local bodies and people have been mentioned in the form of pseudonyms. The research team met health workers and visiting patients from three health facilities (one Primary Health Care Center and two Health Posts) from Rautahat district and one Health Post in Gorkha district.

This paper bases on the information acquired from personal conversations with 50 research participants from various segments of the society and five ward members of a rural municipality from Rautahat district have made their contributions in the form of group discussions. The conversations were held with 18 health seekers during their visits to the respective health facilities in these four different local municipalities. We also had conversations with 16 health workers in their respective health facilities, mainly about their experience of serving the people in a federal context. These health workers included the in-charge of each of these health facilities where we conducted a field study, medical officer, paramedical and nursing staff, lab technicians, and female community health volunteers (FCHVs). Our research was also enriched with the information from two Health Facility Operation and Management Committee (HFOMC) members, two non-governmental organization (NGO) workers, and two private pharmacy owners and dispensers. The interviews were also conducted with municipality/rural municipality officials from each of the four sites. Field notes (Emerson, Fretz, and Shaw, 1995) mainly in the form of “scratchnotes” (Clifford, 1990) were the part of information generation during observation and interactions process.

I have taken help of research guidelines and checklists to generate information staying closer to the ground and focusing on ‘small places’ that speak to ‘large issues’ (Eriksen, 2010). All the information were analyzed thematically ‘without

missing/ignoring the nitty-gritty of the research realm' (Uprety, 2009). In addition to priori themes, I also looked for the grounded themes across the primary datagenerated from the study.

### **Management and Operation of Health Facilities**

In principle, Health Facility Operations and Management Committee (HFOMC) is supposed to govern all the affairs of the health facility for its smooth operations and to increase local people's access to available health care services. This paper highlights the very foundation of its formation, operation, how the HFOMC members understand their roles and responsibilities, and how far they assume them.

Aiming to encourage local communities to take greater responsibility in managing local health facilities and health programs, in 1999, the Government of Nepal (GoN) passed the Local Self-Governance Act, based on which the Ministry of Health and Population (MoHP) decided to decentralize health service management to local bodies. Only by 2002/2003, the MoHP began the formal hand-over process of health facilities. As per the request letter (2017) of the Federalism Implementation Unit of MoHP, written to the Ministry of Federal Affairs and Local Development (MoFALD), the MoHP advised the latter to inform the local bodies for the formation of HFOMC in the respective health post and PHCC at all local bodies. The content of the letter itself shows the complexity that the ministerial decision is made by MoHP, whereas it has to be implemented by MoFALD. This could be the reason that the message does not have mandatory provisions rather; it has a mild tone that the advice could be appropriate for the operation and management of the health facility.

Each HFOMC consists of nine to thirteen representatives from the municipality/rural municipality. As per the guideline, the Chairperson of the municipality will be the patron and there will be seven members in the committee, which comprises of four members by default of their position (ward chair, local headmaster, representative of the business community, and health facility in-charge). Additionally, there has to be three more nominated members, one by the municipality chair and two others, including a female, by the ward chair (MoHP, 2018). Ironically, some service providers do not know precisely how many members have to be there in the HFOMC and how many have to be nominated.

The composition of HFOMCs often does not reflect the constitutional thirst of inclusive democracy. A health facility I have observed in Gorkha district comprised a Dalit as a member of the committee, whereas, out of four health facilities that our team studied in Rautahat, none of them had any Dalit members in their HFOMC. One ward secretary had observed that even if there were a Dalit representative, that person would

be strategically selected as an illiterate (*aaunthachhap*), whose job simply would be to obey what the other members would propose.

Often, people are not informed about the formation of HFOMC. Local elites decide how to choose its members, without informing and consulting local people. As an administrative officer narrates, how to and whom to select in the HFOMC could represent a typical case of reality:

Ward chair became the chairperson of the HFOMC by being the ward chair of the concerned ward where the health facility is located. There was no consultation with the Dalits, scholars, and marginal segments of the society, instead, all the rest elected four members of the ward were nominated as members of HFOMC. Even a person who had donated 10 *Kaththa* land to the health facility was also not consulted, even though he was also interested in joining the committee.

Alma-Ata Declaration (1978) has accepted community participation as one of the crucial constituent parts for the successful implementation of primary health care strategies. HFOMCs can play critical role in enhancing community participation in the health sector. However, inclusive participation of local people in these HFOMCs has been limited to the rhetoric. Gurung and friends (2018) have found that there is only 77% representation of Dalits in such committees. They further claim that “the HF (O)MC member selection process and decision making within the committees were influenced by powerful elites”. This has ultimately curtailed their participation despite having their representation. Nonetheless, people are aware of the representation of various segments of the society that no monolithic approach can prevail there.

### Physical Infrastructural Facilities

I conducted this study at a Primary Health Care Centre (PHCC), located in a rural municipality in Rautahat district. This PHCC is located in two-storey building, built only a couple of years ago. This building looks fine from the outside. I met an acting in-charge of the PHCC in 2019 April to talk about her experience and assessment of the operation of this health facility. Amidst our conversations, she pointed to the stains inside her office room where there was a flooding mark. It was from the 2017 flooding in which the building sank up to five feet. That flooding caused the damage of various documents, equipment, medicine, and medical supplies. Service providers had to drown themselves to visit the health facility. During those days, no patients and health seekers visited the health facility. Several stakeholders, inside and outside of the health facility, stated that the health facility is about five feet below the ground level, and that makes it bound to drown in the rainy season.

This health facility is spread into a sufficient amount of land. However, it still does not have a placenta pit on its premises. Each time, a birthing mother or her relative has to dig a hole for the placenta. For many service providers, this is a shameful act. A Community Medicine Assistant (CMA) who is from the same locality thinks “it is not related with the resources rather the matter of sensitivity of the municipality people who have to provide fund for the construction of the pit, it does not cost much”.

There is an alternative perception about the unavailability of the placenta pit. An accountant of the very rural municipality is states:

I could not get a request for an appropriate budget and technical estimation of placenta pit construction from the PHCC, and thus, I could not allocate funds for that. Without proper estimates, anytime I can be punished in the name of embezzlement. I do not want to be trapped in the problem (*phasnanachahane*).

Likewise, other health facilities have pointed out that their inability to run lab during the load shedding/power cut hours. Besides, running a health facility in insufficient space/rooms, which leads to the curtailing of the capacity to deliver quality service, has been reported by two health facilities. Ignoring their repeated requests has become a regular phenomenon in many municipalities in Rautahat district. A Health PostIn-charge says:

Our toilet collapsed on the rainy days of August 2017. We had requested the ward chairman for its construction immediately after this. We have to go to the open space even when we are in our office. Even now (November, 2018), we have not managed to rebuild.

Sometimes, when the municipality does not listen to them, health personnel/in-charge find coping mechanisms on their own, which is reflected in his statement:

Our toilet and hand pump had been non-functional for a year. Also, we had to confine ourselves only to three-room building. It should have had ten rooms to be well-equipped to serve the patients. The ward office did not provide any support. I did maintenance on my expenses. Besides, I also initiated gardening in the compound as I have to stay here for a long time.

In an instance, a supportive ward chairperson straightforwardly allocated a sufficient budget for the infrastructural improvement. In my field in Gorkha district, a Health Post in-charge told me that the Ward Office provided Rs. 50,000/- to build drainage around the health facility to protect it from the monsoon flooding. It also allocated Rs. 1, 50,000/-to buy essential medical equipment.

Inadequate physical infrastructural facilities ultimately affect health seeking of these women. Grown-up as bona fide women (Dahal, 2018a), upholding the existing gender norms and values, affects them not only at the household and community but also up to their journey to health facilities and their interactions with the service

providers. As shown in rural India (Bhandari and Dutta, 2007), most health workers, especially the ‘doctors’, hesitate to serve in the rural areas due to overall infrastructural inadequacy. Moreover, physical infrastructure is an essential factor influencing patient satisfaction in the healthcare delivery system (Hussain et al., 2019). Local people and health service providers have also realized that the availability of infrastructural facilities affects the viability of and quality of health care delivery.

### **Local Circumstances Constraining Availability of Services**

In many health facilities, there are no proper and effective means of dissemination of information on available health care services. Sometimes, they have banners and flex boards on their walls. However, because of the medical and public health jargon and sometimes even literacy itself becomes a barrier for the people to understand what is written there. A medical officer from the PHCC states, “We do not have a proper channel to inform people about the available services. Though it is written there, I do not think that needy people understand this”.

The complexity also emerges when the health seekers do not know, rather, are not correctly informed, about how long a particular diagnosis takes up and whom they have to consult. Such confusion prevails not only in the local health facilities but also at the district hospital. In such an encounter, our field researcher follows an older man of about 60 years old from a rural part of the district. He could not manage to get his diagnosis reports before 3:00 p.m. and thus could not consult the physician on that day. When he approached the hospital on the following day a doctor told him “I have not checked up you earlier. So, you have to find the one who did that yesterday. Look for him in another room”. It is not easier for the patient, who cannot read and write, to find the doctor’s name and whether and where he is available. This kind of behavior is not limited only to the manner of health care delivery (Hahn, 1995, p. 263) rather is a constituent part of everyday bureaucratic practices that systematically produces arbitrary outcomes in its provision of care (Gupta, 2012). The bureaucratic procedures act as structural forces (Dahal, 2018b) in shaping the limits of health facilities to deliver care services.

Most of the time, in such hospitals, it is not the physician who deals with and diagnose these patients but the paramedics or administrative staff who come forward on behalf of these physicians. Often they ask the patients to collect the reports around 3:00 pm. And by 3:00 pm, when the patients go to collect them, they would be advised to come the next day, or, in case of hurry, they are advised to consult the doctors in their private clinics. This really becomes irritating for the patients who visit the hospital from distant places and need to return home in the evening. Eventually, these kinds of

behaviors, “the manners of its delivery” (Hahn, 1995, p. 263), discourage the patients to visit there again.

Sometimes, the availability of services is also affected by the inharmonious relationships among the service providers. A Health Coordinator from Madhav Narayan Municipality, Rautahat stated that one of their health posts had recently discontinued its birthing center because of a dispute between the in-charge and the ANM (Auxiliary Nurse Midwife). Because of that, the municipality is in the process of transferring the ANM to another health facility. However, her nexus with an influential political party has halted the transfer process. Some health facilities in the district had discontinued the twenty-four hours of emergency services for not getting paid for their overtime service. A PHCC in Rautahat had posted a notice on its wall which says that because of their inability to get money for the overtime job for the first half of 2017 they have closed the emergency services. Whereas the coordinator and sub-coordinator of health services at that municipality stated that they could not make the payment as the claimed overtime money was excessively high, much higher than their annual salary.

Unlike in hospitals providing tertiary care services in the Kathmandu and Chitawan, health seekers have not gone for confrontations with the service providers (Dahal, 2020). Constrained by the limited availability of health care services and the way they are delivered, people in the southern part of Nepal choose to go for cross-border medical travel to India. In such conditions, they go to neighboring towns and cities not only for the locally unavailable health care services but also for the ones which are available at the locality or the district headquarters. In these circumstances, people’s imagination of the health system includes the health care services available even beyond their national boundary (Dahal, 2019).

### **Provision of Human Resources and Absenteeism**

Sita Devi Mahato, 45, got a ticket from Out Patient Department (OPD) around 2:00 p.m. at a PHCC in May 2018. The health personnel at the OPD informed her that there is no doctor. She became furious and asked the service providers, “Whether poor do not have any options” (to get health care services at the government health facility)? She was there for the treatment of her ear. Even though the medical doctor was not there at that time, other health personnel did not bother to check her. Upon her return, an ANM in her probation period stated that since the in-charge is not present there regularly, then why others should have to provide care to the patients? Altogether, there is thirteen staff in this PHCC. They have not received their salary and allowances for two months in mid May 2018. Their provident fund had not been deposited for ten months. It was mainly because of their dispute with the municipality regarding the emergency allowance.

Frequent absenteeism has been normalized in the health facilities. What makes people annoyed is not the absence of any of the staff but the lack of timely information of that. Lack of information before getting an OPD ticket or waiting for a long time irritates the service seekers. On May 30, 2018, when the doctor did not appear in a health facility by 12:30, patients and visitors became frustrated and questioned why the doctor has not turned up yet? After half an hour, the service providers turned up at the OPD and the patients waiting for the dressing approached him for that. However, as there was no medicine for the dressing, these patients got further irritated and scolded the staff for not informing them when they were waiting for the doctor. Later on, in my inquiry with other service providers, I learned that they do not prefer to tell the service seekers about the unavailability of the medicines they are looking for. They want to cover up the lack of medicines by the absenteeism thinking that the responsibility will not fall upon them. Then the visiting person will express their anger for the absentee and not blame the one for not providing medicine.

In our frequent visits to different health facilities, we have found that absenteeism of health personnel till 11:00 a.m. was not unusual. Although the health facility used to be opened by the peon/assistants, however, during this early hour presence of all the staff was not a common phenomenon. Ghimire and colleagues (2013) have shown that working lack of environment is the primary factor that leads to absenteeism of health work-force in Nepal. On the contrary, I would like to add that absenteeism of the health workers also contributes to creating the deteriorating working conditions.

The way the health facility in-charge treats other staff affects latter's motivation (not) to work. A lab assistant from a PHCC was not happy with the discriminatory behavior of the in-charge, who provides 2-3 weeks of absence without any leave to a few staff, and they can sign the attendance register upon their return to the office. Some other female staff even blamed that those who have affairs with the in-charge are the ones who get the chance to go to training. For them, there is no problem with attending the facility and they can easily do their attendance even after a month of absence. In contradiction to what these health personnel reported, a ward chairman thinks that these days the absenteeism of health personnel has declined significantly. Regardless of whether the ward chair is correct or the ANMs, at least either party is trying to construct the truth to support their intent of projecting it.

Another crucial implication of absenteeism of health personnel is that the staff, often the peon, without any medical/paramedical training, had to deliver the services and medicines. At the local level, along with other paramedics, they are also regarded as doctors. Based on their observation of how to diagnose, counsel, and dispense medicines, they provide medicine to the health seekers, even in the absence of

medics/paramedics. One peon from a health facility further told us that he had acquired such knowledge as he used to work at a pharmacy before joining this office. This situation does not seem to have been overcome from the time when Justice (1986) had already pointed out about such practice some thirty years ago. These peons are the ones who have to reach to open the health facility on time in the morning.

It is not always absenteeism, but also the unavailability of adequate health personnel in the health facility has sometimes curtailed the health delivery capacity in Nepal (Gurung and Tuladhar, 2013), even if these institutions are prepared with required medical equipment. X-ray and Electrocardiography (ECG) machine at a PHCC in Rautahat are reportedly have been lying idle because of unavailability of a radiographer. It is interesting to note that DHO and the municipality office is also aware of this situation, and none of them materialized their promise to resume these machines as functional.

### ***Rit Puryaune: Social Audit, Monitoring, and Transparency***

Social audit is a way of measuring, understanding, reporting, and ultimately improving an organization's social and ethical performance. Usage of this term can be traced as far back as the 1950s. It rests on the premise that democratic governance should be carried out, as far as possible, with the consent and understanding of all concerned stakeholders. Therefore, it is a process and not an event (Food and Agricultural Organization of the United Nations [FAO], 2019). Monitoring, on the other hand, can be understood as observation and checking the quality of something over a period through systematic review of the activities carried. Our research participants have pointed out some significant aspects of monitoring and social audit, which is supposed to be part of the operation of the health facilities.

While talking to an ex-chairman of the HFOMC, it is revealed that he does not know about the practice of social audit in the PHCC our research is based on. It is not only the patient and general populace of the community; rather, he was also not aware of such things prevailing in the health facility-“I was not aware of the activities carried out by the health facility even during my chairmanship”. It seems that there was and has been a tendency to view health facility as a medical domain and thus the commoners, regardless of whether they are in the HFOMC or not, do not have any say in the process of their operation and management.

Officially, it is the responsibility of the health coordinators and sub-coordinators of the municipality monitor health facilities operating under this health facility stated the in-charge of the PHCC. However, while talking to the in-charge other health facilities we got to know that rarely there is any monitoring by the coordinator and sub-coordinator. In-charges of these local health facilities have understood that “There is no

budget at the health post these days. Thus, there is no monitoring. We used to have monitoring only about the budgetary aspects, to inquire about whether the estimated budget was burnt or not”.

The research assistant had the opportunity to observe and participate in conduction of social audit on July 5<sup>th</sup>, 2018, at the end of the fiscal year. There was a social audit program conducted by an NGO called Forum for the Improvement of Society (Samaj Sudhar Manch). The program can be tentatively translated as ‘a ward level program conducted to public information acquired through the social audit of health facilities’.

At the beginning of the program, it is revealed from the conversation with the NGO representative about how the program was arranged. He had asked with the health facility in-charge, “as a local from a reputed family, can you please help me find some participants for this social audit program? It will be better if they will be around 25, for the logistic matter”. Though the in-charge had agreed to call for some participants for the meeting, however, it is clear from no presence of community members in the social audit program that he has not made a reasonable effort. Neither the PHCC has disseminated any information through its network and its official platform, nor does the NGO seem to have tried for that. There were only four FCHVs and few service providers from the same health facility. The in-charge repeatedly pointed and addressed an IT (Information and Technology) Officer of the municipality as a representative of the service user. That IT officer was smiling at the in-charge. This NGO got responsibility from the DHO to conduct a social audit. Ironically, when the health facility in-charge began to present the annual report, he felt sorry that there was no one commoner in the program. Later on, while talking to some other FCHVs in the community, we knew that they were not informed about this social audit programme.

Most of the research participants pointed out the prevailing situation of the lack of transparency in local level governing units like municipalities and rural municipalities, and health facilities. Some people stated that lack of appropriate and skilled human resources at the municipality office has mainly curtailed transparency in the activities carried out by the municipality. This is further aggravated by the practice of formation of user’s group to implement the developmental programs. Local people have understood that there is a clear provision of who can be a member of the user group. In an absence of such explicit provision, local level executives -municipality chair, vice-chair, and ward chair- select their *Aafno Manchhe* (one’s own people) (Bista, 1991) for the user’s group not from the project implementation area but from elsewhere. This effectively helps to cover up and curtail transparency.

Health personnel, who have a conflictual relationship with the municipality officials, especially regarding the overtime money, have observed that ‘corruption has

increased these days significantly, and now it has become open. Nowadays, municipality officials, mainly the chair and vice-chair have become corrupt and autocrat. They do not listen to anyone. They only do it as *Rit Puryaune*, ritual, in performing any developmental activities.

Sometimes people suspect, when the health personnel and the municipality officials are from the same caste group, same political party, or the kinship network, then the chances of forming an alliance for their own benefit i.e., *milimato*, and they can easily conceal the information and run the health facility without being transparent. *Milimato* etymologically comes from *milnu* i.e., to be in harmony with or not to have any gap and *mato* refers to an agreement. Collectively, it connotes that the people in power secretly act for the benefit of their circle.

Health facilities do not public their revenue and expenditure to the public. Amidst the situation of frequent lack of essential medicines in these health facilities, no practice of making them available raises the suspicion of the local people towards the health facility and the staff working there. Contrary to general people's blame to health facilities, sometimes, health personnel attempt to normalize the lack of transparency as common phenomena in the locality. They argue that it is not only the health facility that is not transparent but also the municipality is ahead of them which does not hold its assembly on time and does not make its activities, resources, and expenditures public. Since the ward chair is also a chairperson of the health facility, he can transcend what he learned from the municipality to the health facility management and operation. The empirical data from this program reveals that social audit has become a mere activity of *RitPuryaune*, only meeting and confirming the formal criteria. In practice, social audit is conducted simply to show following the law or legal criteria, it has been done whereas the actors, in essence, want to have, what can be regarded as the appropriate impact or consequences.

### Conclusions

Often health facilities are projected as a dispassionate entity that delivers health care services, whereas, local stakeholders have divergent viewpoints to look at them based on their social positioning, location, affiliation with the political party, and the kind of relations with some health personnel. In this sense, health facility, as any other social institution in the society, provides space for construing the varieties of discourses. It is never left as a sacred entity considering its utilitarian value to promote health and well-being of the people, which is also embedded in broader social and cultural contexts (Dahal, 2007).

It is the primary responsibility of the government to promote the health of its people (Dodgson, Lee and Drager, 2002, p.7). The unfolding scenario in the Nepali

federal context shows that the government has not been able to meet this expectation in its fuller sense. On the other hand, people have realized the importance and the instrumental value of health in their everyday life. This has made people to look for better options in the health care services, and thus, often they tend to look for health care services in the private sector (Dahal, 2017) and even across the national boundary (Dahal, 2019), mainly because of the poor availability of health care services.

It is also apparent that there is no transparency in the operation and functioning of the local bodies and health facility not because of less attention towards this pillar of the governance but due to the deliberate attempt of the people in power to create a chaotic situation (Gupta, 2012). Lack of transparency helps them to take benefits of these public institutions and their resources for their personal or group advantages, which eventually hampers the collective good of the society at large and the marginal segment at most. This has weakened the health governance as a component of health care system and incapacitated local bodies to deliver the health care services.

Inadequate attention to the promotion of inclusive participation in health care delivery is reflected through the sphere of infrastructure as well. Sociality of particular kinds stems from the infrastructural condition of the health facility. The power rooted with the ‘social relations embodied in materials’ (Law and Mol, 1995) emanates as ‘social arrangement of infrastructures’, remarkably influence the sociality of the health service providers, health seekers, and the interactions between them. While observing the materials, a researcher may simultaneously witness the production of the social (p.274). The social reflected at the health facility is not purely “social” and the artifacts and infrastructures generating them have politics (pp.276-281).

One of the main thirsts of the federalization process in Nepal is the promotion of inclusion and democratic participation in the operation, management and benefit-sharing of the diverse categories of people, including women, Dalits, and marginalized segments of the society. Instead of paying attention to the promotion of inclusion and participation, authorities are found to have tended to nominate their people, *Aafno Manchhe* (Bista, 1991). The thinking of *Aafno Manchhe* also prevails in the selection of local staff and in providing opportunities to go for training and leave facilities to the staff of the health facilities. Same is the fate with any other kinds of user’s group. Local-level authorities till now seem to be fulfilling the formality as *Rit Puryaune* without paying adequate attention to real desired impact whether it is the case of formation of user’s group, conduction of social audit, or formation of HFOMC.

The mode of health service delivery affects the level of patient’s satisfaction. In case of isolated incidents of health personnel’s behavior, we can take that as a manner of individual. If it were a manner, it would have been limited to the individual; rather, it is the fact that it prevails in different health facilities means such kinds of behaviors are

exhibited by one or other service providers over the period. These behaviors are rooted in everyday bureaucratic practices (Gupta, 2012) and thus form a kind of pattern which discourages health seekers from revisiting the health facility. This makes them to consult a local pharmacist or go for cross-border medical travel to neighboring towns and cities in India.

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## Water and Sanitation for Population Health and Wellbeing: The Nepalese Initiatives

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### Abstract

*A person's wellbeing is highly dependent on both the quality and the availability of water, and efficient management of this precious resource. Both biological disease agents and chemical pollutants are compromising drinking-water quality. Contaminated water causes a range of often life-threatening diseases. Of the waterborne diseases affecting a person's health, mostly children, the deadliest are diarrhoeal infections. To manage the supply of quality water with the required quantity, it needs proper policy and programme in place to ensure improved and total sanitation for public wellbeing. Though the implementation strategies are constrained by resource scarcity, poor designing, environmental catastrophes, Nepal has done ample policy and planning efforts in the water and sanitation sector.*

**Keywords:** water, sanitation, total-sanitation, health, wellbeing

### Background

The importance of water has attracted human attention, since ancient times in both eastern and western civilisations. It is taken as holy good of purity while performing religious-cultural rites in our society and taken as a source of life and operation of the natural cycle. Therefore, water is a source of maintaining good health of the natural processes and ecosystem of the earth; fostering human civilisations and human's aesthetic and internal (physiological) health. Maintenance of human health is dependent on adequacy and safety of food intake and use of safe and clean water and access to minimally acceptable sanitation facilities. Public sanitation depends on usable water's four characteristics as quantity, availability, reliability, and quality (QARQ). The components of sanitation to affect health and quality of human life include personal cleanliness; washing clothes; behaviour of proper hand washing; use of improved toilets; making households and communities open defecation free (ODF); septic wastewater drainage system, and the others. Until, 2019 26% of the world's population is out of the coverage of at least a basic sanitation<sup>†</sup> service and the figure increase to the 38% population of Nepal. Globally, inadequate sanitation claims annually a

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<sup>†</sup> Reliable water supply, toilets or latrines, open defecation free, and systems for the safe management of excreta.

sizable\* diarrhoeal deaths and is accorded as a significant factor to induce several neglected tropical diseases, including intestinal worms, schistosomiasis, and trachoma. Poor sanitation and unsafe water also contribute to childhood malnutrition (WHO, 2019). Realising the multifaceted importance of the commodity, the constitution of Nepal (2015) under the right to health care (clause 35) takes access to clean water and hygiene as fundamental rights of its all citizens (Constituent Assembly Secretariat, 2015).

Owing to the important contribution of water and sanitation in poverty reduction and ending hunger, the 2030 agenda of Sustainable Development Goals (SDGs) take water and sanitation in sixth<sup>†</sup> of 17 priority area of ending global poverty of its all forms. While adopting the agenda, global leaders widely recognised water and sanitation as fundamental human rights; and placed increased attention on water and sanitation issues in the global political agenda with the statement of:

Enough fresh water in quantity and quality, is essential for all aspects of life and sustainable development. ---- Water resources are embedded in all forms of development e.g., food security, health promotion and poverty reduction, in sustaining economic growth in agriculture, industry and energy generation, and in maintaining healthy ecosystems (UN 2018).

Owing to the importance of sanitation on human health, the SDG target 6.2 calls for the guaranteeing adequate and equitable sanitation for all, that has characteristics of ‘safely managed sanitation services’ – privately use of an improved sanitation facility by households, where the excreta produced are either safely treated in situ, or transported and treated off-site (WHO, 2019).

The global burden of diseases and fatalities resulted from inadequate water, sanitation, and hygiene are preventable. However, it still is claiming over 800,000 lives each year from low- and middle-income countries – of which 60% of total diarrhoeal deaths. The largely preventable diarrhoea remains a major killer. Improved water, sanitation, and hygiene could prevent a significant number of deaths of children aged under five years. Therefore, beyond reducing the risk of diarrhoea, benefits of improved sanitation extend to:

reducing the spread of neglected tropical diseases such as intestinal worms, schistosomiasis and trachoma, that cause suffering for millions; reducing the severity and impact of malnutrition; promoting dignity and boosting safety, mainly among women and girls; promoting school attendance of girls by the provision of separate sanitary facilities; and, potential recovery of water, renewable energy and nutrients from fecal waste (WHO, 2019).

Studies concluded that there was a return of 5.50 US\$ in lowering health costs, increasing productivity, and reducing premature deaths for every 1 US\$ investment in sanitation (WHO, 2019).

Safe drinking water supply and sanitation services are fundamental instruments for improving public health and meeting national poverty reduction objectives. It is

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\* Estimated total of 432,000 in 2019

<sup>†</sup>Ensure availability and sustainable management of water and sanitation for all

recognised that lack of access to these essential basic services contributes substantially high burden of disease. The beginning of systematic planning in utilisation of water, sanitation and hygiene is the history of epidemiology, medicine and public health. It also depicts the history of industrialisation, urbanisation and related urban misery. Limited access to this service impairs the lives of too many populations of the country. Many people, both in rural and urban areas, are affected by waterborne and water-related diseases due to the use of unsafe water, poor hygiene practices and inadequate sanitation facilities. This pushes people to face several problems and lose opportunity to income sources. Rural women particularly, are deprived of finding income sources due to hardship of availability of water as they spend several hours a day to fetch water from far away sources (MoUD, 2014).

Water and Sanitation (in brief called WASH) refers to the provision of safe water for drinking, washing, and domestic activities, the safe removal of waste (toilets and waste disposal) and health promotion activities to encourage protective healthy behavioural practices amongst the populations. WASH was essential to meet the Millennium Development Goals related to environmental sustainability and health. It receives equal importance in the 17 Sustainable Development Goals (SDGs). Inadequate WASH can restrict medical treatment in health facilities, degrade environmental conditions and increase community vulnerability, and impede achievement of sustainable development targets.

### **WASH for improved and total sanitation**

Water is a key component to attain universal access to improved sanitation for better hygiene, health and environment – and to create total sanitised communities. The Nepal Sanitation and Hygiene Master Plan, 2011 (GoN, 2011), defines different conditions and processes of mitigating a society as total sanitised or total behavioural change if achieves the mutually re-enforcing and inter-related actions and behaviours. The interrelated conditions and actions to attain total sanitation and behavioural changed society are those, if meet the following essential elements:

#### ***Improved sanitation facilities (Toilet)***

Adopting from the Joint Monitoring Program (JMP) of UNICEF and WHO, the Master Plan defines an improved sanitation facility as one that hygienically separates human excreta from human contact. Toilets made only for single household use, of the following types are considered as improved sanitation facilities: Flush or pour-flush to piped sewer system, septic tank, pit latrine; ventilated improved pit (VIP) latrine; pit toilet with slab and lid; and composting toilet (eco-san).

#### ***Total sanitation***

The Master Plan 2011 defines the term Total Sanitation as a 'range of facilities and hygiene behaviour that lead to achieving sanitized condition of the designated areas (VDC and municipality including settlements, *Toles*, school's catchments, etc). Total Sanitation concentrates on ending Open Defecation as a first significant step to an entry

point of changing behaviour. The second step includes all arrangements leading to ensure sustainable hygiene and sanitation behaviours. Therefore, the concept of total sanitation expects to achieve a sanitized condition in two phases in a sustainable manner as follows:

### ***Open defecation free (ODF) situation***

Open Defecation (OD) means defecating in the open and leaving the faeces exposed. ODF means 'Open Defecation Free' i.e., no faeces are openly exposed to the air. The collection of faeces in a direct pit with no lid is also a form of OD but with a fly proof lid, then qualifies for ODF. The following indicators/criteria are necessary to meet to declare ODF:

No presence of OD in any designated area at any given time; all households have access to improved sanitation facilities (toilets) with full use, operation and maintenance; all the schools, institutions, offices within the designated areas have toilet facilities; availability of soap and soap case for hand washing in all households; and, general environmental cleanliness including management of animals, solid and liquid wastes is in place in the designated area.

### ***Total sanitized post-ODF situation***

This phase includes all arrangements leading to sustainable hygiene and sanitation facilities and behaviours. Although the respective community/VDC/municipality themselves may identify and implement various hygiene and sanitation parameters during the post-ODF in the following three dimensions. *First, five* behavioural change related indicators of key hygiene and sanitation include use of toilets; practice of hand washing with soap or cleaning agent at critical times; safe handling and treatment of drinking water (e.g. Point of use treatment) at households; maintenance of personal hygiene (regular nail cutting, bathing, cloth washing, daily combing, tooth brushing etc.); and proper solid and liquid management in and out of the home. *The second* dimension of indicators are related to household sanitation such as mandatory provision of toilet and hand washing facilities such as soap, washing platform; availability of brush, brooms, cleaning agent, etc. at the toilet; covering food and water; regular cleaning of rooms, yards, and household compound; management of animal shed; construction of covered wastewater pit; access of safe drinking water; provision of bins/pits to collect/dispose solid waste, and, installation of improved cooking stove/biogas (optional). *The third* categories of indicators are related to institutional sanitation. Arrays of prescribed indicators include all institutions must have users-friendly clean, hygienic toilets with hand washing with soap station and proper waste management facilities; schools must have child, gender and differently able (CGD) friendly water, toilet and hand washing (with soap station) facilities including menstrual hygiene facilities. They must have garbage pit facilities within the premise, and all institutions must keep their premises clean and hygienic.

Though the coverage of the water and sanitation schemes in rural areas accorded to increase substantially in the country, studies (MoUD, 2014) identified the following types of problems the rural WASH sector facing in the country:

poor functionality of the completed schemes - about half of the schemes are reported as non-functioning and are in urgent need of massive maintenance; conversion of rural settlements as urban centres after construction of WASH schemes and the system to be grossly inadequate in many of the rural communities due to increased population and improved living standards of the people; depletion and drying up of the surface and sub-surface sources, and dispute in the source among competing user community and competing use of water from the source in absence of a scientific and comprehensive water resource planning at local levels (MoUD, 2014).

Ownership for planning, implementation, management, and maintenance given to the local user communities viewed to overcome such problems/constraints.

### **Emergence of the WASH sector in Nepal**

With the establishment of the Department of Water Supply and Sewerage in 1972, the government of Nepal started to give high priority to the sustainable promotion and development of the WASH sector in the country. Since then, in close collaboration with community organisations and external development partner's government introduced a number of water, hygiene and sanitation related policies, strategies, plans and action programmes aimed at achieving total sanitised communities and localities in the country. Accordingly, the government showed its active participation in WASH related global and regional conferences and meetings, endorsed and ratified movements and declarations. As a result, the sector received high-level political commitment through putting water, hygiene and sanitation as fundamental rights of the people in the Constitution of the Federal Republic of Nepal 2072 (2015). The National Water Supply and Sanitation Sector Policy-2014 is the recent most initiative for the long-term sustainability of the sector. The policy identified six mutually reinforcing components of active participation and coordination in the successful implementation of community-level WASH activities for its longer-term sustainability. The mutually re-enforcing six pillars for the longer-term sustainable development of the sector as outlined in National Water Supply and Sanitation Sector Policy 2014 include, 1) gender equity and social inclusion, 2) environmental sustainability, 3) cost recovery and affordability, 4) operation and maintenance, 5) institutional management, and 6) legal frameworks. Where ways, the National Water Supply and Sanitation Sector Policy 2014 is the outcome of series of related plans, policies, programs and strategies consistent with the international policy instruments as in Table 1.

Table 1: Chronological initiatives and commitments in the development and strengthening of Water, Hygiene and Sanitation Sector in Nepal

Year	Initiatives, Major Objectives/features
1972	- Establishment of the Department of Water Supply and Sewerage (DWSS) during the period of fourth Development Plan 1970-1975
1980	- Signatory of UN Declaration for International Drinking Water

	Supply and Sanitation Decade
1992	- Establishment of the Environmental Sanitation Section (ESS) at DWSS
1993	- <i>Janatako Khane Pani Ra Sarasafai Karyakram</i> , (JAKPAS), MPPW/World Bank (Pilot 1993-1996)
1994	- Nepal National Sanitation Policy and Guidelines for Planning and Implementation of Sanitation Program, MPPW • KAP study on sanitation, DWSS/UNICEF
1996	- National Policy on Solid Waste Management - Establishment of Rural Water Supply and Sanitation Fund Development Board (Fund-board) (exist till date)
1998	- Establishment of the Steering Committee for National Sanitation Action (SCNSA) - National Water Supply Sector Policy (Policy and Strategy), MPPW - Establishment of Department of Local Infra Structure Development and Agricultural Roads (DOLIDAR)
1998	- Department of water supply and sewerage (DWSS) and UNICEF, developed 'Basic Sanitation Package' - Department of water supply and sewerage (DWSS) developed 'Five Year Action Plan on Environmental Sanitation Promotion' - Ministry of Local Development (MoLD) implemented 'Local Self Governance Act' where WASH is taken as a high priority area of community development
2000	- DWSS & SCNSA, in collaboration with UNICEF, prepared and published 'Nepal State of Sanitation Report' - SCNSA initiated to observe and celebrate 'Annual National Sanitation Week' - DWSS & UNICEF introduced 'School Sanitation and Hygiene Education (SSHE)' program in 15 districts of the country - DWSS prepared a draft version of 'National Sanitation Policy – 2000' and revised in 2002 - Initiation of 'Water Resources Management Project (WARMP)' in six districts of Mid-western and Far-western regions with support of Helvetas (2000- 2012)
2003	- DWSS, in support of ADB, initiated 'Community Based Water Supply and Sanitation Project'

	<ul style="list-style-type: none"> <li>- Government level participation in the 'First South Asian Conference on Sanitation (SACOSAN)' in Bangladesh</li> <li>- SCNSA/NEWAH initiated 'Nepal WASH campaign' in the country</li> <li>- DWSS/RWSSFDB, in collaboration with UNICEF, developed 'Participatory Hygiene and Sanitation Transformation (PHAST) approach</li> <li>- Piloting of Community-Led Total Sanitation (CLTS) approach</li> </ul>
2004	<p>Development and Enforcement of:</p> <ul style="list-style-type: none"> <li>- <i>National Rural Water Supply and Sanitation Policy</i>, and</li> <li>- <i>Rural Water Supply and Sanitation National Strategy</i></li> </ul> <p>The policy and strategy contained the following objectives:</p> <ul style="list-style-type: none"> <li>o To set a new target to provide safe, reliable and affordable water supply with basic sanitation facilities to all population giving special priority to the backward and ethnic communities</li> <li>o Reduce water-borne diseases and save the time and labour of men, women and children from fetching the water</li> <li>o Focus on a massive renovation, rehabilitation, improvement and expansion works of the existing system and increase the quality of service.</li> </ul>
2005	<p>Launched '<i>National Water Plan</i>' with an overarching objective to reduce the incidence of poverty, unemployment and under-employment in the country. Specific goals are as following:</p> <ul style="list-style-type: none"> <li>- To provide people with access to safe and adequate drinking water and sanitation to ensure good health; increase agricultural production and productivity for food security; --</li> <li>- To prevent and mitigate water-induced disasters</li> </ul>
2009	<p><i>National Policy for Urban Water Supply and Sanitation</i> with the following objectives is introduced.</p> <ul style="list-style-type: none"> <li>- To set the cost recovery principles, public-private partnership and sector effectiveness for improved service delivery in proper perspectives according to the need of the day</li> <li>- Identified four major initiatives addressing 'National Urban Water Supply and Sanitation' challenges as a) Small Towns Water Supply and Sanitation Sector Project (STWSSSP); b) Kathmandu Valley Water Supply Sector Development Program (KVVSSSP); c) Urban Environment Improvement Project (UEIP), and d) Integrated</li> </ul>

	Urban Development Projects (IUDP).
2011	<p><i>National Hygiene and Sanitation Master Plan</i></p> <p><i>Goals:</i> The goal of the Master Plan is to attain universal access to improved sanitation by 2017 for better hygiene, health and environment.</p> <p><i>Objective:</i> overall objective of the Master Plan is to create an enabling environment to achieve the national goal of sanitation through collaborative efforts of the government, local government bodies, UN Agencies, bi-lateral agencies, I/NGOs, schools, private institutions, media, civil society organizations, local clubs and CBOs. The primary objective of the Master Plan is to delineate the ways to provide a strategic direction for all the concerned stakeholders to reduce Acute Respiratory Infection (ARI), diarrhoeal disease and other infectious diseases through pragmatic program interventions.</p>
2014	<p><i>National Water Supply and Sanitation Sector Policy</i></p> <p><i>Goal:</i> to reduce urban and rural poverty by ensuring equitable socio-economic development, improving health and the quality of life of the people and protecting the environment through the provision of sustainable water supply and sanitation services.</p> <p><i>Objectives:</i></p> <ul style="list-style-type: none"> <li>- To ensure availability of safe and adequate water supply and sanitation services to all, which include:</li> <li>- Access to and participation of the users, especially that of women, poor and the marginalized groups to serve their interest; protection, development and management of existing and potential surface and ground-water sources and to protect water sources from wastewater pollution. Concerning to technical and financial sustainability, it calls for promotion and use of affordable and cost-effective alternative technologies, local institutional capabilities for planning, implementation and management of water supply and sanitation services, consumer's choice cost recovery schemes to raise the tariff to meet all operation and maintenance costs, promote public-private partnership and strengthen legal framework in the sector for sustainable service delivery.</li> </ul>

*Source: National Water Plan (nd.); GoN, 2011; MoUD, 2014; MoLD Nepal & MoFA Finland, 2005; WaterAid Nepal, 2005.*

### *The planned efforts*

From the beginning of the planned development efforts, all plans have given ample attention to providing drinking water facilities to mitigate the dual objectives of improvement in health and sanitation of common people. Evidences confirmed that drinking water and sanitation programmes are primarily initiated in urban areas and some of rural areas before 1960 (NPC, 1990). Planned initiatives, starting from the fifth five-year plan periods, are taken as benchmark in the field and summarised as follows:

The ***Fourth Five Year Development Plan*** (1970-75) developed 'Drinking water and Sewerage Master Plan'.

- The ***Fifth Five Year Development Plan*** (1975-1980), for the first time set a target of making 'drinking water' available to the maximum number of people, within the next five years. For this, the plan has given importance to rural drinking water Projects in collaboration with the local people themselves (NPC, 1975).

- The ***Sixth Plan*** (1980-85) has taken drinking water and sewerage as public goods of primary necessity of the public sanitation. It has accorded that the provision of pure drinking water raises the health status of the population along with improvements in environmental sanitation. The plan made provision to select projects that are implemented with the active cooperation of the people, who are to be the direct beneficiaries.

- The ***Seventh Plan*** (1985-1990) targeted to supply 317.40 million litres of piped water per day (177.80 million litres in rural and 139.60 million litres in urban areas) covering 12.2 percent population of the total, 11.7 percent populations of the rural areas and 79.9 percent population in the urban areas through the pipe system.

- The ***Eighth Plan*** (1990-1995) devotes a separate chapter on '***drinking water and sanitation***' and takes the availability of drinking water and minimum sanitary facility as the basic needs for the people. Through the rigorous review of past efforts in the sector and existing problems, the plan delineated two objectives as:

- a. To provide drinking water facility to 72 percent of the population, in coherence with the target to provide such facility to the entire communities in the next ten years.

- b. To provide basic knowledge of sanitation and sanitary facilities to a maximum number of people on clean environment and environmental conservation.

The plan, for the first time, placed importance to the implementation of rural drinking water and sanitation programmes in an integrated manner. For this, it laid provision of public-private partnership, broader community mobilisation, women's participation, it gave priority to small projects that require a lesser per capita cost of construction, maintenance and repair at the grassroots level. It made involvement of the user's committee mandatory in all stages of drinking water project, such as identification, design, implementation and maintenance. The plan gave avenues of the involvement of NGOs, local bodies and the private sectors in the construction, maintenance, repair and rehabilitation of the drinking water and sanitation schemes. The plan had taken the policy option of rising community awareness towards health and sanitation through health education. Likewise, the eighth plan ensured multi stakeholder's involvement in

drinking water and sanitation schemes as *NGOs, Private Entrepreneurs, Firms, Companies and Users'communities* basis on cost-sharing, and arrangements of monitoring and supervision of rural drinking water projects (NPC, 1990).

The *Ninth Plan* (1995-2000) gave the importance on the availability of pure drinking water and improved sanitation to make people healthier and save their wasted time in fetching water. The Plan had targeted to provide drinking water facilities to all the people and to expand pure drinking water facilities within the next 20 years. Construction of sewerage treatment system in all urban areas within the next 20 years was planned. To improve the sanitation situation of rural areas, policy encouraged people to construct appropriate and affordable latrines that fit to the local condition (NPC, 1995).

The *Tenth Plan* (2002-2007), also known as the Poverty Reduction Strategy Paper (PRSP) of the country, has taken accessibility and availability of '*drinking water and sanitation services*' as an integral component of the long-term overarching vision of poverty reduction. The long-term vision of drinking water and sanitation service of the plan was to assure the facilities as per the twenty-year Drinking Water Service Perspective Plan. The plan categorized drinking water service into three different levels, viz., high, medium and basic, employing indicators like water quantity, quality, access, supply and reliability. The plan targeted to provide as high as 25 percent population high-level service, provide medium level service to 60 percent population, and to provide basic level service to 15 percent of population (NPC, 2002).

The sector level objectives adopted by the Tenth Plan were:

- Provide basic drinking water service to all regions of the country by gradual upgrading the level of services by the end of the plan period.
- Provide appropriate sanitation facilities both in urban and rural areas by increasing public awareness.
- Assist to reduce the child mortality rate by controlling waterborne and water induced diseases and help to increase income generation through opportunity of utilizing saved labour from illness.
- Involve the private sector in the overall management of urban water supply systems/ facilities and the improvement and up-grading of drinking water projects.

The *Three Years Interim Plan* (2007-2010) adopted water supply and sanitation-related long-term vision and objectives as follows:

- The long-term vision of the water supply and sanitation sector is to contribute towards raising the living standard and the status of public health by making sustainable and equitable availability of water supply and sanitation services.
- In line with the *National Water Plan 2005\**, the water supply and sanitation sector *objectives* of the plan were to ensure sustainable water supply services and a

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\*The plan had set target of achieving total population coverage of basic level of drinking water supply and sanitation services by the year 2017

healthy environment through socially inclusive development initiatives; gradually provide purified drinking water to the whole population; providing treatment facility with an inclusive sewerage system in urban, semi-urban areas and emerging towns; and providing toilets using appropriate technology in rural areas (NPC, 2007).

The second *Three-year Interim Plan* (2011-2013) is developed in line with the longer-term National Water Plan 2005. It adopts the vision and objectives that are compatible to attain universal access to a basic level of drinking water and sanitation services by the year 2017. The objective explicitly states that making sustained availability of safe drinking water and sanitation services helps to improve public health and living standard of the population (NPC, 2011). Likewise, the sectoral policies and planning of the Thirteenth Plan (2014-2016) also corroborate the visions, objectives and targets of the National Water Plan (GoN, 2005) to provide minimum water supply and sanitation services to all population by the year 2017 (NPC, 2014). The approach paper of the *Fourteenth Plan* (2017) targeted to provide essential drinking water and sanitation services to all populations. The dual objectives of the plan include:

- To provide drinking water and sanitation services of a basic standard to all population and
- To expand medium or high standard services of drinking water and sanitation services (NPC, 2016).

The review of planned efforts in drinking water and sanitation services in Nepal revealed that the concept of total sanitation emphasized from the eighth plan period. The plan is also known as philosophical shift from a state-controlled approach to the involvement of the public-private sector in the sector's development. Process of involvement of user committee in construction, maintenance, operation, repair and rehabilitation of the rural water supply schemes is made mandatory since the 1990s. The seventh goal of MDG 'Sustainability' becomes **the guiding principles of the visions and objectives of National Water Plan 2005 and that of the periodic plans concerning to drinking water and sanitation.**

### **Discussion and conclusion**

Though the universal access to basic sanitation, efforts of elimination of open defecation, reach to essential drinking water source appears in the route of improvement; the universal access to basic sanitation in both urban and rural settings of Nepal requires additional efforts. The eight goals of Millennium Development (MDGs) and 17 goals of Sustainable Development (SDGs) explicitly called for national and international cooperation and technical assistance for capacity building and broader mobilization of non-governmental organization, community-based organizations and the user communities for the planning, management and maintenance of the water and sanitation schemes. Accordingly, since the tenth development plan (2002-2007), the Government of Nepal started to take 'poverty reduction through the means of inclusive development' as the overarching development objective in the country. In its poverty reduction strategy paper, the water and sanitation sector is taken as an instrumental component contribute to the achievement of the ultimate goal of poverty reduction and

social wellbeing. The water plan, rural and urban water and sanitation policies and strategies also called for community and user group mobilization to sustain the schemes. Likewise, the National Water Supply and Sanitation Sector Policy 2014 points out the importance of the broader participation of user groups, marginalized and backward communities for the protection, development and management of water and sanitation schemes from all potential sources, for financial and technical sustainability and building institutional capability.

The national government as an apex authority in collaboration with development partners, civil societies and the private sector need to lead the efforts of maintaining public health, prevent transmission of diseases, advising local governments on health-based regulations including water and sanitation. It requires estimating and monitoring the role of water and sanitation in reducing the burden of disease and the level of sanitation access and analyses what helps and hinders progress. This effort is necessary to enable from local to federal governments to generate reliable information/data to decide level of investment to facilitate construction of toilets and to ensure safe management of wastewater and excreta.

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## Trade Deficit in Nepal: Relationship between Trade Deficit and Budget Deficits

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### Abstract

*Nepal has bitter experiences of trade deficit; it has become the tradition of the country. The trade deficit of Nepal has been widening since the decades. The statistical data shows that around 80 percent of imports are from India and China. The growth trend of foreign trade has been increasing in different years after year with a huge amount of trade deficit. As the size of foreign trade increased the trade deficit of Nepal has-been increasing as well. The government of Nepal has been announcing the deficit budget. This study focused to analyze the trends of trade deficit of Nepal and observing the relations of trade deficit and budget deficit. Simple statistical tools are applied to analyze the trend and growth of foreign trade of Nepal and correlation and simple linear regression model has been used to examine the linkages between trade deficit and budget deficit of Nepal. The study has found a strong positive relationship between trade deficit and budget deficit of Nepal. As result, there is a significant impact of budget deficit on trade deficit. The finding of the regression analysis indicates that budget deficit is a significant predictor of trade deficit.*

**Keywords:** Foreign trade, growth trend, linkages, twin deficits, descriptive statistics

### Issues of the Study

The trade deficit of Nepal has been widening since the decades. Minimizing the trade deficit has become a critical issue of Nepal. The statistical data show around 80 percent of foreign trade of Nepal is with two countries: India and China. India alone holds a larger chunk of the trade pie near about 65 percent. Basically, Nepal's exports goods such as, carpets, handicrafts and agricultural products such as palm oil, tea, coffee, fruits and juices. Similarly, Nepal imports almost everything from abroad; the

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major goods are petroleum products, metals items, rice and pieces of equipment and other gadgets. Trade deficits are perceived to be more dangerous with fixed exchange rates because under a fixed exchange rate regime, devaluation of the currency is impossible, trade deficits are more likely to continue and unemployment may increase significantly.

Trade deficit occurs when a country lacks efficient capacity to produce its own products due to lack of skill and resources to create capacity or due to preference to acquire from another country such as to specialize in its own goods, for lower cost or to acquire luxuries. In addition, trade deficit allows a country to consume more than it produces. In some countries, trade deficits correct themselves over time which creates downward pressure on a country's currency under a floating exchange rate regime. With a cheaper domestic currency, imports become more expensive in the country with the trade deficit. Trade deficits can occur because a country is a highly desirable destination for foreign investment. Trade deficits can create substantial problems in the long run. The worst and most obvious problem is that trade deficits can facilitate a sort of economic colonization. If a country continually runs trade deficits, citizens of the countries acquire funds to buy up capital in that nation.

The trade deficit of Nepal has been widening since the decades. Minimizing the trade deficit is the pertinent issue of the country. Nepal has long been constraint between two economic countries with large exporting ones: China and India. The statistical data show that around 80 percent of imports are from these two countries. India alone holds a larger chunk of the trade pie to 65 percent. Basically, Nepal's exports goods like carpets, handicrafts and agricultural products such as palm oil, tea, coffee, fruits and juices. Similarly, Nepal imports major portion of daily consumed goods from abroad, the major goods are petroleum products, metals items, rice and pieces of equipment and other gadgets.

### **Research Review**

This study was conducted to examine the relationship between trade deficit and budget deficit of Nepal. Most of the studies have found significant relationship between trade deficit and budget deficit. Trade deficit and budget deficit of Nepal has been continuously increasing. The research review basically focuses on the relationship between trade deficit and budget deficit of different country context.

Basu & Datta (2005) argued that economic theory has two alternatives hypotheses regarding the relation between the budget deficit and the trade deficit of a country. The two deficit hypotheses claim that a budget deficit causes a trade deficit. The paper undertakes an econometric exercise to study the impact of the fiscal deficit on Indian external accounts since the mid-1980s and finds an absence of co-integration

between two deficits. The findings suggest that the ratios of trade deficit, fiscal deficit and net savings randomly maintain the national income identity and that a high fiscal deficit has been sustained by a simultaneous and independent increase in the savings ratio. Though, the absence of a twin deficit so far, the situation offers no or very limited scope for profligacy in fiscal behaviors both for the center and the states.

Ali (2006) has studied the linkages between budget deficit and trade deficit of Lebanon. The objective of the study was to test the validity of the Keynesian proposition and the Ricardian equivalence in the case of Lebanon. A robust econometric framework called the unrestricted error correction model (UECM) and a co-integration test called the bounds test were used to examine whether budget deficit and trade deficit are co-integrated. As empirical analysis, paper supports the Keynesian view a linkage between trade deficit and budget deficit but the direction of causality was reserved having consistent with many other empirical studies.

Tallman & Rosensweig (1991) used a simple identity to analyze the linkage between the budget deficit and current account deficit. That study found a strong linkage between the trade deficit and the budget deficit. Similarly, Piersanti (2000) used a complicated dynamic macroeconomic model such as the standard portfolio and general equilibrium models to examine the relationship between the twin deficits. Those empirical studies found that the trade deficit and budget deficit have a positive relationship and the relationship was statistically significant.

Most of the empirical studies examined the relationship between the twin deficits for developed countries. However, there have been very limited empirical studies on developing countries. Islam (1998) studied empirically the causal relationship between budget deficits and trade deficits for Brazil from 1973 through 1991 using the Granger causality test, the study showed the presence of bilateral causality between trade deficits and budget deficits. Alkswani (2000) has examined the relationship between the budget deficit and trade deficit in the case of Saudi Arabia. The researcher concluded that there was a long-run relationship between the deficits and affirms the direction of causality from the trade deficit to the budget deficits.

Gary (1987) examined the relationship between federal government budget deficits and trade deficits. Consequently, solutions to trade deficit tend to emphasize policy measures that would be either impotent or very costly. The recommendations ignore the consequences of reducing the trade deficit without a corresponding reduction in the budget deficit.

The relationship between budget deficit and economic variables which attracted a great deal of attention from academics and policy-makers. There are wide range of theoretical and empirical literature examining the relationship between budget deficit and trade deficit. Mundell-Fleming (1963) argued an increase in the budget deficit

would induce upward pressure on interest rates causing capital inflows which would lead to an appreciation in the exchange rate, leading to an increase in the trade deficit. Keynesian theory suggests that an increase in the budget deficit would induce domestic absorption which tends to import expansion, causing a current account deficit. Nepal does not have visible competitive advantage in balancing the trades because of nature of products which we import are beyond our capacity to produce. It illustrates that Nepal needs a huge amount of investment to be able to strengthen its capacity, which in turn would require a massive injection of foreign direct investment. However, the problem relies on the government for not being able to attract foreign investment in adequate manner. The institutional deficiencies, tax policies, corruption and small size of the market are restraining where Nepal is being able to fix its problems in the industrial, agriculture and hydropower production sectors. Therefore, Nepal needs to focus on the areas in which it can gain competitive and comparative advantages. The finding of different research shows that there is significant relationship between budget deficit and trade deficit in the economy. In the context of Nepal, such compressive study has not been yet, so the focus of this paper is to analyze the relationship between budget deficit and trade deficit in the economy. There are ample studies devoted to examine the growth trends, direction of foreign trade of Nepal. However, there is no such specific study with linkages between trade deficit and budget deficit in the context of Nepal. This study was conducted to find the linkages between budget deficit and trade deficit. In the context of Nepal, we find both trade deficit and budget deficit in each fiscal year. Both budget and trade deficit are found increasing direction. This study examines relationship between trade deficit and budget deficit.

### **Research Questions**

Developing countries and least developed countries are generally facing the foreign trade deficit, have capital scarce available resources like labour and natural resources remain underutilized and the scarcity of complementary resources such as technology and organizational skills. Foreign trade is therefore seen as an important means of through which Nepal could avail of such complementary resources in other countries. Budget deficit has been the tradition of developing countries like Nepal. The trend of budget deficit of Nepal has taken significant role since three decades or more. Trade deficits and budget deficits are similar to the twins. Due to the twin effects, Nepal is driving with series of economic problems which tends to increase unemployment, economic inequality, decreasing purchasing power of currency as well. The present study tries to find the answer of the following research questions:

- i. What is the growth trend of foreign trade of Nepal?
- ii. What is the direction of foreign trade of Nepal?

- iii. What is the relationship between trade deficit and budget deficit?

### **Research Objectives**

The general objective of this paper is to analyze the growth trends of foreign trade of Nepal. The specific objectives of the study are as follows:

- i. To analyze the trends and direction of foreign trade of Nepal.
- ii. To examine the relationship between budget deficit and trade deficit of Nepal.

### **Data and Method**

This study is the descriptive and analytical in nature. In regard to descriptive research design, different tables, diagram and examples has been presented as necessary. Similarly, correlation and simple linear regression model has been applied to measure the linkages between trade deficit and budget deficit focusing on foreign trade and government budget of Nepal.

The essential data for this study were gathered from the secondary data sources, like publications and reviews Data published by various government and non-government organizations has been used to analyze the situation. Economic Survey, budget speeches published by Ministry of Finance, data published by Trade Promotion Center and Statistical Year Book and other reports published by Central Bureau of Statistics and Quarterly Economic Bulletin published by Nepal Rostra Bank. Apart from this, reports published by other related sector were also applied. To analyze the relationship between trade deficit and budget deficit correlation and simple regression model has been applied.

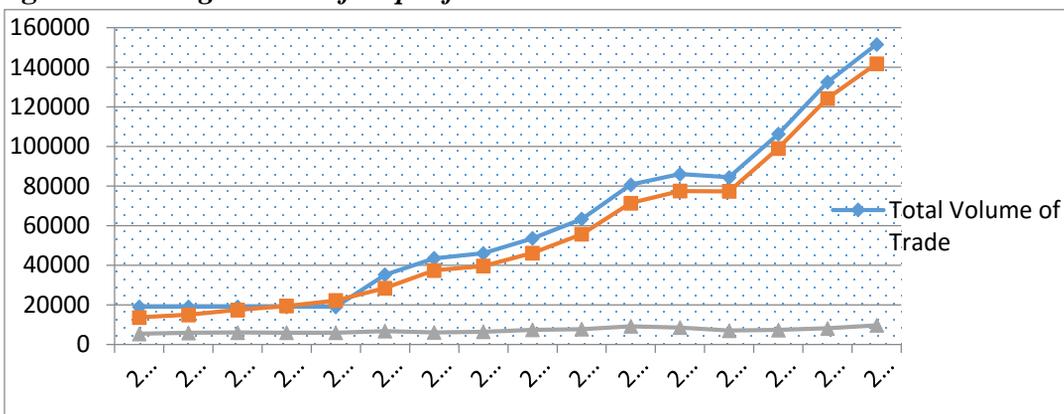
### **Results and Discussion**

The major discussion and results can be discussed in the sections below:

#### ***Growth Trends of Foreign Trade***

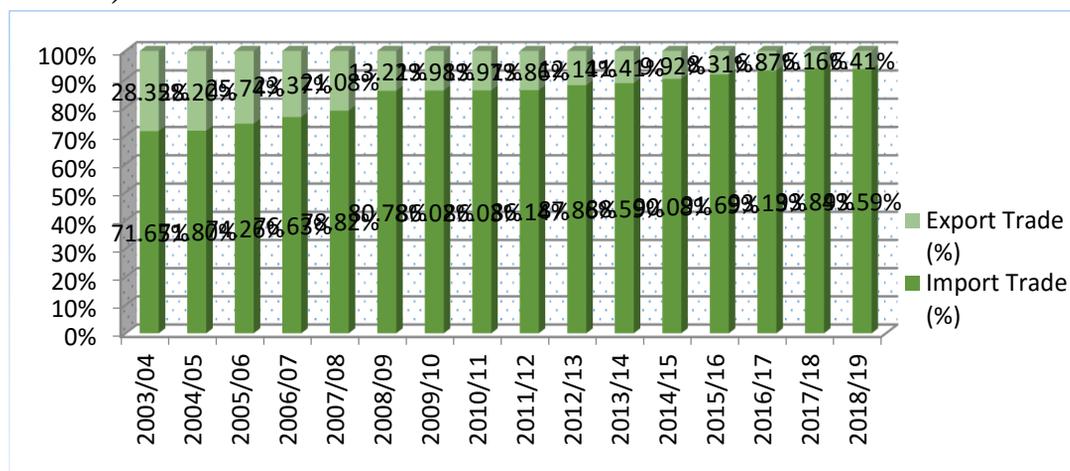
The growth trend of foreign trade has been increasing different years after year having a huge amount of trade deficit. In the FY 2003/04, the share of export in total trade was 28.35 percent and decreased to 6.41 percent in FY 2018/19. Similarly, the share of export trade has further decreased to 6.1 percent. The growth of total foreign trade, export and import trade have the mostly growth trend in the study periods. The trade deficit of Nepal has been increasing during the study periods. In the fiscal year 20003/04, the trade deficit was Rs.82.37 billion which has become Rs.1321.43 billion in the fiscal year 2018/19 (*See Appendix-I*).

**Figure-1: Foreign Trade of Nepal from 2003/04 to 2018/19.**



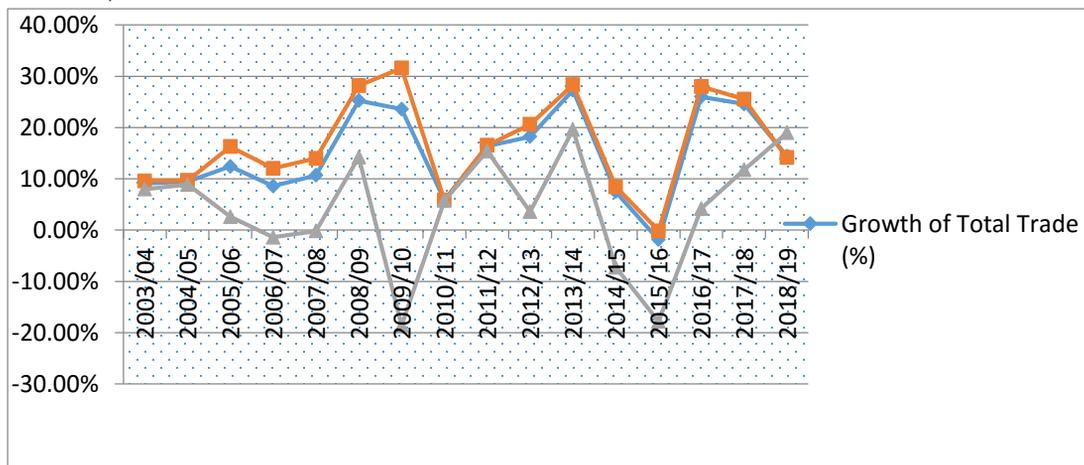
The figure-1 shows the foreign trade of Nepal from 2003/04 to 2018/19. It illustrates that in the most of years, the total volume of trade, import trade and export trade had been increasing. Similarly the gap between import trade and export trade had also been extending which is shown in Figure 2(See Appendix-I).

**Figure-2: Ratio of Import Trade and Export Trade in Percentage Diagram (2003/04-2018/19).**



The figure-2 shows the ratio between import trade and export trade of Nepal. From the data above it can be shown that the export trade of Nepal seems to insignificance in comparison to import trade.

**Figure-3: Growth Trends of Total Trade, Import Trade and Export Trade, (2003/04-2018/19).**

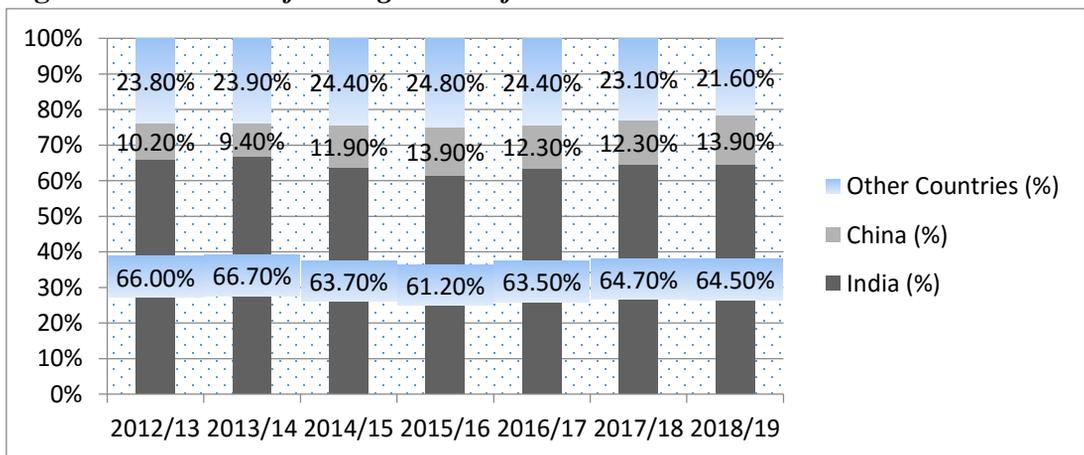


The growth trends of total volume of foreign trade, import trade and export trade have been shown in the Appendix-II and Figure-3. From this figure we can find that the rates of changes are variations such as positive and negative.

**Direction of Foreign Trade**

Direction of foreign trade refers to the trade among Nepal's trading partners. From the past years to the present, Nepal's biggest trade partner has been remained India. Under the efforts to diversify the country-wise foreign trade of the country, though the percentage of trade with India has heavily shrunk down from over 90 percent in early period. India is still the biggest trade partner in the total foreign trade of the country. The share of trade with any other individual country is not comparable to that with India. Direction of foreign trade of Nepal is shown in the Appendix-III.

**Figure-4: Direction of Foreign Trade from 2012/13-2018/19**



In the beginning of foreign trade, more than 95 percent foreign trade was with India only. The foreign trade of Nepal with India was gradually decreasing due to trade

diversification of Nepal. Appendix-III shows that 66 percent total foreign trade of Nepal was only with India, 10.20 percent with China and 23.80 percent with other countries in 2012/13. Similarly, the trade between Nepal and India was 64.50 percent, 13.90 percent with China and 21.60 percent with other countries in the year 2018/19. The scenery of foreign trade of Nepal shows that Nepalese market is dominated by Indian products. Therefore, from the description above we can infer that Nepal has also not diversified the foreign trade according to commodity wide.

**Linkages between Budget Deficit and Trade Deficit**

Economic theory provides two alternatives hypotheses regarding the linkages of the budget deficit and the trade deficit of a country. The twin deficit hypotheses claim that a budget deficit causes a trade deficit. Nepal frequently faces the problem of trade deficit and budget deficit. It is necessary to analyze the relationship between trade deficit and budget deficit how far they are interrelated. Appendix-IV shows that both trade deficit and budget deficits had been increasing in the different fiscal years in the study periods.

**Figure-5: Budget Deficits and Trade Deficits from 2003/04 to 2019/20.**

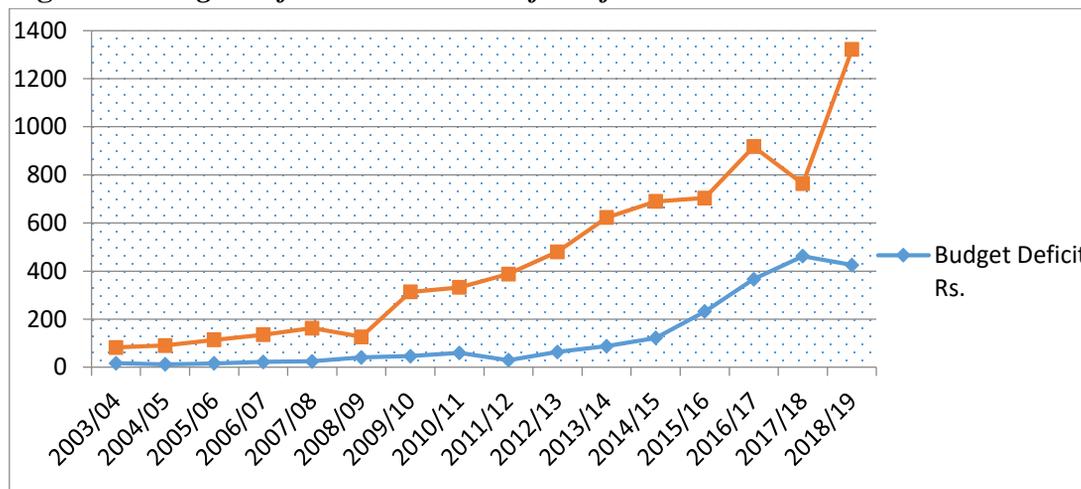
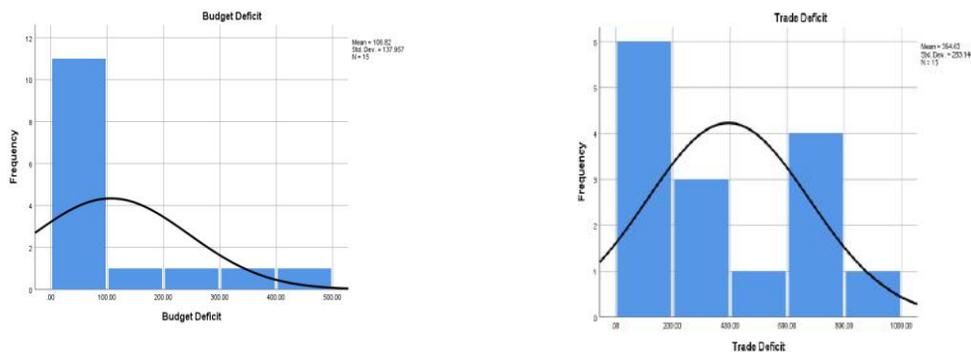


Figure-5 shows that the budget deficit and trade deficit has been expanding which increasing same direction. There is proportional relationship between them.

**Figure-6: Histogram of Trade Deficit and Budget Deficit**



**Correlation and Regression Analysis**

There is significant relationship between budget deficit and trade deficit in Nepal. The impact of trade deficit is measured in terms of budget deficit. To show the relationship of dependent variables and independent variables, correlation is applied and measuring the impact on Nepalese economy, linear regression model is applied assuming budget deficit independent variable and trade deficit as dependent variable. For hypothesis testing, regression analysis was done in SPSS v22 with the following.

There is positive correlation between budget deficit and trade deficit in Nepal. It indicates that when budget deficit increases then the trade deficit also increases. The relationship speaks that budget deficit is the cause of trade deficit in Nepal. There is autocorrelations between trade deficit and budget deficit where The Durbin Watson value is less than 1.5.

**Table-1: Regression of Budget Deficit and Trade Deficit**

Model Summary <sup>b</sup>										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.871 <sup>a</sup>	.759	.742	181.40045	.759	44.107	1	14	.000	1.330
Coefficients <sup>a</sup>										
Model		Unstandardized Coefficients			Standardized Coefficients		t	Sig.		
		B	Std. Error	Beta						
1	(Constant)	198.063	59.318			3.339	.005			
	Budget Deficit (rs. in billion)	2.004	.302	.871		6.641	.000			
a. Predictors: (Constant), Budget Deficit (Rs. in billion)										
b. Dependent Variable: Trade Deficit (Rs. in billion)										

**Source: Calculated by Author based on Appendix-IV.**

In the description above, the *R* value of 0.871 indicates the significant positive relationship between budget deficit and trade deficit ( $p < 0.05$ ). Similarly, *R*-square value of

0.759 states that 75.90% change in trade deficit is due to independent variable. Likewise, Standard error of the estimate of 0.302 indicates the variability of the observed value of trade deficit from regression line is 0.302 units. The result shows that there is a significant impact of budget deficit on trade deficit. It shows a significant association between the changes in budget deficit on trade deficit. The finding of the regression analysis between budget deficit and trade deficit indicates that budget deficit is a significant predictor of trade deficit.

### Conclusions

The trade deficit of Nepal has been widening since the decades. Having the trade deficit as a crucial issue, Nepal has long been constraint between two large economic countries via China and India. The statistical data show that around 80 percent of imports are from these two countries only. The growth trend of foreign trade has been increasing different years after year having a huge amount of trade deficit. Owing to rising imports of goods and services amid slower exports, country's trade deficit has been expanding for a long time. From the discussion above, we come to the conclusion that there is significant relationship between budget deficit and trade deficit in Nepal. A positive correlation between budget deficit and trade deficit is seen in Nepal. The result shows that there is a significant impact of budget deficit on trade deficit. The finding of the regression analysis between budget deficit and trade deficit indicates that budget deficit is a significant predictor of trade deficit.

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## Appendices

Appendix-I: Foreign Trade of Nepal from 2003/04 to 2018/19. (Rs. in Ten million)

Year	Total Trade(Rs.)	Import Trade(Rs.)	Export Trade (Rs.)	Trade Balance (Rs.)
2003/04	19018.78	13627.71	5391.07	-8236.64
2004/05	20817.93	14947.36	5870.57	-9076.79
2005/06	23401.44	17378.03	6023.41	-11354.66
2006/07	25407.77	19469.46	5938.31	-13531.15
2007/08	28120.42	22193.77	5926.65	-16267.12
2008/09	35216.7	28447.00	6769.80	-12677.2
2009/10	43515.9	37433.50	6082.40	-31351.1
2010/11	46051.4	39617.60	6433.90	-33183.7
2011/12	53592.9	46166.80	7426.10	-38740.7
2012/13	63365.8	55674.00	7691.70	-47982.3
2013/14	80635.7	71436.60	9199.10	-62237.5
2014/15	86000.3	77468.40	8531.90	-68936.5
2015/16	84371.6	77359.90	7011.70	-70348.2
2016/17	106316.2	99011.30	7304.90	-91706.4
2017/18	132446.0	124282.70	8163.30	-76320.9
2018/19	151564.48	141853.53	9710.95	-132142.58

Source: *Economic Survey (2003/04- 2018/19) & Department of Customs, 2018/19.*

## Appendix-II: Growth Trends of Foreign Trade (Rs. in ten million)

Fiscal Year	Total Trade (Rs.)	Growth Rate (%)	Import Trade (Rs.)	Growth Rate (%)	Export Trade (Rs.)	Growth Rate (%)
2003/04	19018.78	9.12%	13627.71	9.59%	5391.07	7.97%
2004/05	20817.93	9.46%	14947.36	9.68%	5870.57	8.89%
2005/06	23401.44	12.41%	17378.03	16.26%	6023.41	2.60%
2006/07	25407.77	8.57%	19469.46	12.03%	5938.31	-1.41%
2007/08	28120.42	10.67%	22193.77	13.99%	5926.65	-0.20%
2008/09	35216.7	25.24%	28447.0	28.17%	6769.8	14.23%
2009/10	43515.9	23.57%	37433.5	31.60%	6082.4	-18.61%
2010/11	46051.4	5.83%	39617.6	5.83%	6433.9	5.78%
2011/12	53592.9	16.37%	46166.8	16.53%	7426.1	15.42%
2012/13	63365.8	18.23%	55674.0	20.60%	7691.7	3.57%
2013/14	80635.7	27.29%	71436.6	28.31%	9199.1	19.60%
2014/15	86000.3	7.48%	77468.4	8.44%	8531.9	-7.25%
2015/16	84371.6	-1.89%	77359.9	-0.14%	7011.7	-17.82%
2016/17	106316.2	26.01%	99011.3	27.99%	7304.9	4.18%
2017/18	132446.0	24.58%	124282.7	25.52%	8163.3	11.75%
2018/19	151564.50	14.43%	141853.53	14.14%	9711.00	18.96%

Source: Economic Survey, 2019/20 & Department of Customs, 2019/20.

## Appendix-III: Direction of Foreign Trade in Nepal, 2018/19 (Rs. in Ten Million)

Fiscal Year	Total Trade (Rs.)	India		China		Other Countries	
		Trade Rs.	%	Trade (Rs.)	%	Trade Rs.	%
2012/13	63365.8	41803.1	66.00	6453.7	10.20	15108.9	23.80
2013/14	80635.7	53756.1	66.79	7615.9	9.400	19263.7	23.90
2014/15	86000.3	54752.1	63.70	10239.6	11.90	21008.7	24.40
2015/16	84371.6	51670.6	61.20	11737.6	13.90	20963.4	24.80
2016/17	106316.2	67511.9	63.50	12894.7	12.30	25909.7	24.40
2017/18	132446.0	85641.9	64.70	16251.6	12.30	30552.5	23.10
2018/19	151564.5	97190.9	64.50	20552.7	13.90	295099	21.60

Source: Economic Survey, 2019/20.

**Appendix-IV: Budget Deficit and Trade Deficit of Nepal, 2003/04-2018/19 (Rs. in billion)**

Year	Total Budget Rs.	Budget Deficit Rs.	Total Trade Rs.	Trade Deficits Rs.
2003/04	102.4	16.839	190.19	82.37
2004/05	111.689	12.115	208.18	90.77
2005/06	112.07	16.560	234.014	113.55
2006/07	143.912	22.451	254.078	135.312
2007/08	168.996	24.561	281.204	162.671
2008/09	236.159	41.116	352.167	126.772
2009/10	285.93	46.34	435.159	313.511
2010/11	337.9	59.91	460.514	331.837
2011/12	384.9	29.65	535.929	387.407
2012/13	404.82	63.83	633.658	479.823
2013/14	717.24	87.7	806.357	622.375
2014/15	618.10	121.81	860.003	689.365
2015/16	819.469	231.53	843.716	703.482
2016/17	1048.92	366.13	1063.162	917.064
2017/18	1278.99	461.77	1324.446	763.209
2018/19	1315.16	425.03	1515.645	1312.426

**Sources: Budget Speeches from 2003/04-2019/20 & Economic Surveys 2005/06 to 2019/20**

## **Violence as Communication: A Study of Propaganda of the Deed under Nepal's Maoist Rebellion**

Kundan Aryal, PhD\*

### **Abstract**

*The study focuses on the communication strategy of an insurgent group. It explores and critiques the acts of violence aimed at creating terror employed by the then Communist Party of Nepal (Maoist) during the 10-year-long "People's War" in Nepal. In course of exploring information and communication system maintained by the party and its outreach strategy during the insurgency, the research outlines the features of the then CPN (Maoist) regarding the communication during the period. The process and tools of internal as well as external communication used by a clandestine organization thus become the major study of the work. The study is based on the literature published by the party and interviews with the Maoist leaders. It reveals a well-functioned communication system was its lifeline of the rebel. The mode of the dissemination of favourable message was mainly based on the violence; they use the term red terror.*

**Keywords:** Insurgency, propaganda of deed, total war, terror

### **Introduction**

Declared with two symbolic attacks in the rural area on February 13, 1996, Maoist's "People's War" was a violent internal uprising against the state. After receiving no response to the 40-points demand put forth by the then *Samyukata Janamorcha*, a political wing of the party, CPN (Maoist) officially announced their People's War with the attacks on a police station at Rolpa and Sindhuli Districts. The insurgency that initially opposed the political system and associated laws in place in Nepal at the time culminated in the Comprehensive Peace Accord in November 2006. Maoists prefer to call their insurgency a rebellion. The Comprehensive Peace Accord (CPA) also uses similar terminology. Gradually it started to communicate terror through violent and brutal activities. Subsequently, the violence began to create a public discourse among the multiple target audiences.

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Even the then CPN (UML) had concluded under the heading of publicity activity that the Maoist has moved forward the publicity campaign in a planned way (UML, BS 2058, p. 24). Over the years it has been clear on the surface that the Maoist publicity was mainly based on violence. Creating immense terror was one of the tactics under the communication strategy of Maoist rebels of Nepal. The individual killing was part of the strategy in Maoist War. The then CPN (Maoist) in the course of forwarding its Peoples War depended on different forms of violence to threaten the people so that they would listen and abide by their instructions. In course of the insurgency aimed at revolution, the Nepali Maoist rebels utilized communication as part of the strategy. Of the total 4839 killings by Maoist from 1996 and 2006 as much as 1366 killings were brutal (INSEC CD-ROM). They had a linear procedure of creating an incident, speeding terror and pose them as effective and influential in the society to draw the attention on them. In summary, Maoist of Nepal had a system of communication-based mainly on the violence as content and propaganda as the tool to establish the image of the party within and outside the country.

The Party has a belief that it could draw national and international attraction by violent acts. It had stated that successful military actions in the form of ambushes, mining, commando attacks and sabotage have been carried out almost daily in different parts of the country. Particularly the ambushes and mining have been so effective that the royal mercenaries have virtually ceased to venture into the rural base areas, except with exceptional preparations (Information Bulletin-8). Against this backdrop, this essay tries to uncover the Maoist communication strategy focusing on their way of spreading propaganda. It tries to record the Maoists efforts to communicate about their war strategies.

### **Methodologies**

The essay discusses the Maoist communication system during the decade long insurgency in Nepal (1996 to 2006). The study adopts two methodologies. First, examine the Maoist communication activities by reviewing the relevant literature. Second, insights are acquired by the key informant interviews from some of the key actors. Third, it analyses the insurgency with the lens of a couple of case-studies. Hence, it is concentrated on the act of violence which was implied by the then CPN (Maoist) under the supreme commandership of Comrade Prachanda (later it was revealed that he was Puspha Kamal Dahal) as one of the major tactics within the overall communication strategy. Generally, during the escalation of violent conflict, the party mobilized different sectors and walks of lives including the professional media. The party runs its newspapers, online portals and radio stations. Thus, it tried to make the optimum use of conventional and new media technologies. In the beginning, it uses

traditional technology, mostly, interpersonal communication to spread messages in both rural and urban areas. But after entering "the phase of strategic balance," the party began to use advanced technology such as the internet and satellite phones. Baral (2012) states that the Party declared that its military strength entered into the phase of strategic balance from the phase of strategic defence after the established to Peoples Liberation Army Nepal in mid-2001 in Ropla under the supreme commandship of Prachanda (p.68). Further, during "the phase of strategic offence," after around mid-20004 according to Baral (p.69), they also organized press conferences to seek coverage in national and international mass media outlets.

### **Marxism-Leninism-Maoism and communication**

The then CPN (Maoist) sees consistent and genuine revolutionary movements all over the world and Prachanda considered such movements as the prognosis of the invincible ideology of Marxism-Leninism-Maoism (Prachanda, 2007, p.231). As McKenzie states communist philosophy is based on primary writings of Karl Marx and its translation into the practices. He links communist ideology with the act of communication as follows: The contrast between the ideas of communism and how it has been practised by some governments have at times obscured a tempered study of communist philosophy as it relates to media systems (p.76).

Marx considers communication as the means of cultural production used by the ruling class to serve their ideology. In the former USSR, Following Marxism, Lenin developed and implemented a normative theory, Bolshevik style of functioning of media. Wilbur Schramm terms it as the Soviet Communist Theory (1972). In course of time, Mao accomplished another experiment with the Marxism in China. According to (McKenzie, 1993): Under Mao's leadership, Communist Party ideology was influenced heavily by Leninist Communism, which sought to overthrow capitalism through a workers' revolution and to redistribute the wealth via the working class (pp60-61). McQuail argues that the question of power is central to Marxist interpretations of mass media (2000 p.76). Marx envisions establishing the command of the working class over the media and communication so that they would not be used as the instruments of control for a ruling class. McKenzie, (1993) states that Communist philosophy holds that the role of the state is to be the caretaker for the wellbeing of society" (p.76). In course of analyzing philosophy for media system, he observes that Communist philosophy holds that if individuals work together as a collective whole, then it is possible to achieve an egalitarian society in which there are no wealthy classes and no poverty classes (1993, p.76).

On one hand, Marx doesn't talk about the usage of communication to complement violence, on the other; Mao presented his idea to grab the flow of

communication to create the desired message. The communication system of the Maoists of Nepal is influenced by the strategies and tactics of the revolutions led by Mao Tse-Tung. Prachanda (2007) quotes Mao as who says that weapons are of course the important elements, but not decisive the factor. Mao views that human beings are the decisive factors, not the materials (p.109). Hence, Maoist actively uses extreme means to create propaganda in the belief that such propaganda enhances its outreach. His perception regarding the way of overcoming rumour by that acts of armed resistance manifests in his saying, "Definitely we were capable to rebellion against the rulers, because we have got support form a wider range of people (2007, p.447)

### **Violence as communication**

On the foreword of *Violence as Communication* (1982), Mc Quail (1982) states that the issue leaves little doubt, at the least, that the concept of 'harmful news' has to be taken seriously and that the question of media responsibility at the time of terrorist events is both urgent and hard to deal with. According to him in the public debates of recent years arising from the apparent spread of terroristic activity of all kinds, the role of the news media has been given considerable attention (p.ii). The book is revolving the idea that without communication there can be no terrorism (Schmid and de Graaf (1982, p.9).

Maoist's communication strategy which encompassed propaganda is found to be designed to aggravate its People's War. As Kunczik (1993) says, it is understandable that the party was aware of the fact that "without communication, no society can exist, develop and survive" (p.25). According to Kunczik (1993), for the existence as well as the organization of every society, communication is a fundamental and vital process (p. 25). Stating that every joint action by individuals is based on meanings is communication and shared, Kunczik (1993) mentions that communication means not only transmission but also a community; participation (p.25). Baran and Davis (2000) quote Lasswell in this regard. They state that Lasswell argued that the economic depression and escalating political conflict had induced widespread psychosis and this made people susceptible to even crude forms of propaganda (p.74). According to Lasswell (1950) an eligible target for 'propaganda of the deed' is some personality whose loss will terrorize the enemy and weaken the unity of will of those who uphold an established order (, p. 66). Since politics is about communication and communication is shaped by politics, it is relevant here to cite Meyer (2000, p.14) who says, at all times it has been obvious that communication was one of the crucial constituents of political life. In support of his argument, Meyer quotes the famous German-American Political Scientist Karl W. Deutsche, who says politics is nothing but communication. Thus, all political efforts or moves would be based on communication, either knowingly or

unknowingly (p.14). Hence, the propaganda of deed based mainly on violence has been considered as an effective communication tool by the rebels and insurgents in a different part of the world. Lasswell (1950) states that in terror, as in assassination, propaganda goals are uppermost, and the overt acts are timed to produce the greatest possible psychological effect" (Pp. 67-68). The CPN (Maoist) uses propaganda to influence the political communication as part of its War Thus propaganda is seen as an integral part of its Total War, as Prachanda (2007, p.230) terms, against the state.

As Nwogbaga, (2016) argues, in the context of violent conflict either parties began to believe that the extent to which public opinions reflect realities on the grounds of politics largely depends on how the waves of propaganda blow the perceptions of the people. The Maoist Party of Nepal resembles with anon-state groups which pursue 'terror' tactics against governments, soldiers and civilians of their own or other countries.

Bob (2005) argues that most local movements, having far fewer resources, labour alone to attract media coverage. For them, a frequent and relatively cheap strategy is political "spectacle," a major, highly visible, sometimes novel event. Common forms include strikes, mass marches, and land invasions. Violence and terror, which often attract the media more effectively than peaceful events, may also be considered forms of spectacle. Whether violent or nonviolent, however, the key is action grabbing media attention and dramatically encapsulating a challenger's identity, grievances, and demands. Without such a spectacle, the likelihood of sustained and substantial media attention is small (p.26). McNair (2011) presenting his observation about the category of political organization which pursues its objectives by illegal, often violent means, states that "Terror", in this context, includes bombings, assassination, kidnappings, and hostage-taking – actions which will in most cases be of minor military value, being designed rather communicate political messages of various kinds. Terror, in this sense, is a form of political communication, pursued outside the realm of constitutional procedures (p.167).

### **Their deeds of propaganda**

Maoist creates violence for the sake of publicity. The Party creates a pseudo atmosphere where they appeared as a strong force. Activities of the then CPN (Maoist) manifests a strategy of disseminating clear messages with individual killing, in several cases. Subsequently, the Party shows its involvement in manipulating the media by obtaining significant coverage.

*Janadesh* weekly was running under the editorship of Krishna Sen., a forefront Maoist leader in the sector of publicity, with the legal registration number 41/047/48 in Kathmandu District Administration office. on 5 January 1999, The Weekly publishes

news, with a banner headline describing the Maoist attack over a police station in the rural part of Lalitpur. The headline read: "Courageous Attack over Bhattedanda Police Station." Teaser headlines of the news were, "Bravery Day got success historically", "Two policemen dead, four injured" and "Four 3-0-3 Rifles and two hundred bullets were captured." The presentation can be taken as an example of the inherent relationship between the act and the propaganda.

Many a time, Maoist created terror by attacking the relatively soft target. For instance, on January 26, 2003. The head of Nepal's armed police force, Krishna Mohan Shrestha, his wife and his bodyguard were shot dead this morning by the Maoist rebels in Kathmandu ("Nepal Police...", 2003). One battalion commander of Maoist Peoples Liberation Army (PLA) justified his version with the following words: "Cleansing of Krishna Mohan compelled the government to declare a cease-fire and start the talks" (Atom, BS 2064, p.6). Thus The Maoist Party disseminates the desired message through the violent act time and again during the insurgency. One of the distinct examples of such an effort to attract the attention towards them was the killing of Krishna Mohan Shrestha, Inspector General of Armed Police Force (APF) while he was in morning walk in plain cloth. It was Maoist's strategy to spread propaganda by its deeds from the very beginning.

In a quest to disseminate the WAR, the rebel Maoist documented the battle in camera and produced the copies of VCD to publicize their activities in several incidences. They captured the preparation of the attack, the speech before sending the troops to the battle and moment of attack depicting that they are winning the war. They organized the public show of those kinds of publicity-documentary across the remote villages.

One of such VCD, entitled *Pratyakaraman* [Counter attack], was publicly distributed by the central broadcasting department of the then CPN (Maoist). That documentary comprises of March Past of Maoist insurgents and the scenes of battles from Palpa, Butwal and Taulihawa. Difficult routes covered with snow and their struggle to go forward, leaders providing consolations to the injured insurgents and the scene of jailbreak and the moment of the freedom for the prisoners were the glimpses of the documentaries. They also documented the interviews with the captured security personal.

One of the documentaries reveals that when they assume that the government agencies knew the plan and date of Butawal attack, they change the date. It also reveals that they travelled 21 KM on the vehicle to attack Taulihawa. The documentary shows that they returned on the vehicle in the daylight after the attack. Similarly, they have shown their combatants dancing on the highway after getting success and March Pass. After the Palapa attack, they have shown the use of satellite phone saying that Chairman

Prachand is eager to know about the success. The documentaries depicted the use of SAT phone by the leaders during their activities.

The notion of terror was at the heart of the communication strategy of Maoist. One of the decisions taken in the meeting of the Party Politburo held in late 2001, after the emergency declared by the government, was a clear indication of belief over the notion of terror. The decision reads: To make guerrilla action rapid and effective in *Tarai*, major cities and urban areas it is essential to concentrate all the strength and fully demoralize the enemy and fortified the base of the rebellion by making the enemy entirely harassed (Baral, 68). The strategy was to spread 'red terror' against the 'white terror' spread by the state.

According to Prachand (2007), they spread red terror as per the necessity. He thinks it happens occasionally during the revolution. He cites one example as they attacked a police station at Thankot, Kathmandu. He opines that casualties could be less or more, but when terror is essential we need to create it (p.222). The party was committed to making people feel about their strong presence through acts of violence. In a bid to describe his War's prominence a year after its inception, Prachand (2007) counts the acts such as special action against "feudal" their agents and capitalists and around 6000 actions within a fortnight across the country (p.182). The Maoists exploited various rhetorical components such as definitions, labels and symbolism following acts of terror. Thus, in retrospective, the Maoist Peoples War" demonstrates a relationship between their acts of terror and communication and public psyche.

### What they say

Krishna Bahadur Mahara, a senior negotiator from Maoist party during the talks, says in an interview for this write up that the aim of publicity was only to assist and achieve the goal of people's war which was our mission; we developed our means for publicity. He adds that because of their activities; the national and international media were attracted towards them. According to Mahara, during the last phases of strategic balance and strategic offence, the party began to organize press conferences to disseminate information through the media available in the open market which are supposed to be more effective than their publications, for the wider audience. He reveals that in the beginning, they published handwritten publications from different places, later they used radio and online as tools for the same purpose.

According to Mahara, they were not up to the level of the perception that the Maoist media strategy was stronger. He says that as the perception about the Maoist was different, the People's War was considered as a mystery world outside the country. According to him, that was the cause of why they were at the centre of attraction for the

media and their benefit media started giving more priority to the news related to their activities.

Mahara explains the Maoist way of the flow of information as follows: "We disseminated our decisions through a press release and statements during a certain period. I started disseminating decisions when I was made a spokesperson. According to him the information related to the party and other committees were used to be made public by the Publicity Department. He says that the duty of the Publicity Department was to publicize and elaborate on the decisions made by the committees and the party. He adds that initially the Party's decisions were made public through statements by the head-quarter and later on, the job was entrusted to the Publicity Department and the Spokesperson.

Senior Maoist leader Mahara, in an interview for this study, says that principally they were oriented to spread such propaganda for the sake of class-interest. He further adds that however, they could not push it to the extent we wanted it to. According to him, they failed to manage the propaganda campaign properly. Likewise, the then Maoist leader Rabindra Shrestha, who was the chief of the publicity wing once, explained the meaning of publicity for the party firstly as publicity of its vision and thought. He adds, second, publicity of exposure of ideologies and practices of the opposition parties and the government. As third observation he presents the alternative reality, broaching the alternate. He says fourth, to help the war directly. Central point was to win the people's heart by winning them ideologically, then only it was possible to win in other fronts such as military and economic. Shrestha concludes him in a personal interview that Job of the publicity was primarily related to the ideology. Shrestha, on the question about killing of Krishna Mohan and her wife, says in the personal interview that the action was followed by the government's message for a proposal for talks. According to Shrestha it shows an example of wining in terms of psychology. He then adds it shows the state's tendency to ignore when the low-level personnel were killed but started to present themselves more politically or hurriedly to resolve the problem politically when higher-level personnel were targeted. He terms such action, killing of Krishna Mohan, as the annihilation of the top leaders of the time. He further explains that if the damage in the leadership level in our part continued and no significant loss in the enemy side meant an obvious imbalance in the strength of the force. He further elaborates, that the party needs to take care of self-esteem. According to him, otherwise, such incidences diminish the self-esteem of the soldiers. He argues that imbalance of strength was obvious if we were capable to incur damage only to the level of low ranking personnel and no loss at a higher level. He further explains that it is insufficient to hand down actions only against the lower ranks and avail the objectives

of the People's War. Political pressure amply when, the action is taken against the core cluster.

Prachanda in a bid to describe the success of his party's violent actions, states that only one month after the start there was a big national debate about the question of People's War. Every newspaper, every radio, everybody in the country was asking: what is this People's War, what is this Maoist party? "He further expresses pride on the deeds: " In one push, the party was established in a big and national way and it was in the centre of the debate, after only one month" ("Special to RW", 2010). Though Maoist chairman claims there was no policy to kill people, he explains that "In times of war, in difficult circumstances, things might not work as planned and at times, even though we might have wanted, we might not have managed to organize things the right way. But in general, according to him, from our side, there has been and there will be no force on people" ("Prachanda interview", BBC, 2010). He adds that the policy of his party is that informants of the army, the ones who work as spies and have committed the crime of killing people, then there would be action against them. He states that there is a policy to act against them. He clarifies the context as follows: But there is no policy that we kill people generally on the basis that they have helped the royal army. According to him, it was unfortunate if such an incident does happen. He states that they have been admitting to this and publicly apologized for it. Whenever such a mistake is made and someone loses their life outside of our policy, they have asked for a pardon from the people ("Prachanda interview", 2010).

To the question, is not it that murder drive gained momentum when the hostage police of Chiraghat Police Post in Dang was a murder at the beginning of the People's War and the party was unable to hand down punishment to the offenders even though the issue was raised and discussed in the central committee meeting, Mahara replies: Kill or be killed is but a natural phenomenon in direct-war. But it was not our party policy to kill any of the hostages. He states that the incident of Chiraghat of March 3, 1999, was taken by the leaders responsibly and they reviewed the incident as their weaknesses, however, at some occasion, the self-actuated local level cadres took the elimination drive in their hand under the presumption that it could be done before the higher-level leaders knew it.

Shrestha claims that the casualty incurred on both sides during battles was palpable. He states that they have examples of releasing the police hostages without harming them once we controlled the targets. However, in the case of Chiraghat, Dang Shrestha continues: It could be because of the poor level of understanding of the field commanders or the result of a heavy loss that further forced them to reprisal. He further says that the trend of the killing of the hostage after gaining control over the posts surged up as in the action taken at Chiraghat of Dang. According to him in the action,

some of the police constables were killed in presence of Pasangjee and Barshamanjee after the police post was taken under our control. Shrestha further states in this regard, the leaders, the central committee members, may not be aware of the reality at once. Briefing the incident he says that when they get the news on the paper, they thought they were killed in the encounter. However, he reveals that later on, they came to learn that order was given to kill them. Some of the leaders who were involved apologized for their mistake.

### **Conclusions**

The Maoist propaganda tactics based on the terror is observed as the effort to mould public opinion. Maoist uses terror through violence as one of the prominent instruments for propaganda. The Party mainly uses violence to create fear to ensure that the people do not oppose the Party. Hence, the individual killings are seen as the part of the communication strategy in Maoist War. For instance, Krishna Mohan was made a target for the propaganda of the deed. Albeit CPN (Maoist), upheld an ideology comprised of Marxism-Leninism-Maoism, its drive for power was supplemented by the act of violence and consequent terror.

As mentioned above, the party demonstrates the characteristics of propaganda in several cases to complement its armed actions. Moreover, it lured the international community, threatened the state, and ruled over the mindsets a significant population with the help of propaganda. One of the instances Maoist tries to spread propaganda by creating hype of their strength was the attack on a nearly abandoned police station at Bhattedanda, Lalitpur during the earlier phase of its War.

In the context of Maoist insurgency, the term "action", refers to violent acts. Apart from its presence throughout the country, Maoist creates impact through actions with the motif of propaganda. That said, "Prachanda Path", or the official program of the party, had no separate and clear communication policy. However, the party had created a functional communication system as part of the "People's War". During the period, it issues press statements, sets up newspapers, radio, and websites and received fairly wide coverage in both national and international media. Apart from running the organization in clandestine mode, the party disseminates the messages forcefully through various violent performances.

Hence the decade long Maoist insurgency follows a range of tactics, from cultural performances to military attacks, abduction and killing aimed at assisting in availing the goal of the Maoist's People's War in line with the party's publicity and communication strategy. Withholding information that could damage the image of the Party was also a tactic. 'Hubbub in the East and strike in the West' was another tactic

within guerrilla warfare tradition. The tactic proves to be useful for the party in covering some important military activities, particularly, sensitive locations. The Maoist approach of communication comprises of two major factors a) capability of destruction and, b) capability of conducting propaganda by communication the effects of destruction. The two factors are seen to be places as cardinal in Maoist communication strategy. The then CPN (Maoists) under the leadership of Prachand largely gains control over the flow of information on its activities during its People's War. The party, with the instruments of violence, conveys its message of terror not only to the enemy but also to people who are seen reluctant to support their activities. The terror escalates the Maoist influence in every aspect of the Nepali society for about a decade.

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## Shifting of Governance and Justice: A Reference of Nepal

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### *Abstract*

*Governance is the exercise of the political, economic, social, and administrative authority to manage the nation's affairs. Power and justice strengthen systems to support human rights, peace, unity, democracy in the country. The governance system in Nepal since the ancient period of Kirats, Lichhavis, Mallas laid in Hindu Religion, Ved, Mundhum, Shmritis, Manab Nyayasastra, and order of the Kings. At the beginning of the modern period, after the unification of modern Nepal from Shahs, Ranas, Panchayat till the youngest republican democratic state, justice and governance make the Nepalese authority more accountable, transparent, inclusive, efficient, and participative. From the ancient to the modern times, governance emphasizes interactions between state, and social actors and among people representative themselves. Shift from Dharmasastra to judiciary and other ADR procedures since the ancient to the modern period are/ were the primary methods to govern the state. The paper aims at presenting several dimensions to analyze paradigm shift of governance and justice system from ancient period till dates where the journey from Dharmasastra to the rule of law, independent judiciary, and people's supremacy. It highlights justice delivery in Nepal, which has slowly and gradually integrated into a centrally administered national judicial system.*

**Keywords:** *justice, governance, the rule of law, dharmasastra, Nyayasastra, smritis, transparency, accountability*

### **1. The concept of Governance and Justice**

Sophal Ear (2002) states that governance broadly operates at every level, such as household, village, municipality, nation, region, or the globe. Justice is a social concept that originates in man's life in the society. In the past, justice is as to punish the dishonest, and protect the honest. John Finish (2011) a legal jurist, provides the requirement of justice as the practical reasonableness that one favors the common good of one's communities. In every walk of life, justice is the end of the government. The inception of governance and justice is as old as the evolution of human civilization.

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Justice in *Nicomachean Ethics* by Aristotle is happiness. Justice is honored as the supreme principle of all principles. Justice is reward for the society. It is just like the poor kids who are provided shoes, bags, dresses, books and copies, and free education. Fight to justice and governance is said to be started from the very beginning of human civilization. Justice is peace and genuine respect for people, fairness, justness, fair play, fair-mindedness, equity, impartiality, and lack of bias, objectivity, and neutrality, lack of prejudice, open-mindedness, and happiness. The concept of justice differs from culture to culture. It does not remain same forever.

Governance is the just exercise of authority, the capacity of problem- solving and conflict resolution. UNDP (1997) indicated the word governance as the exercise of economic, political, and administrative authority to manage a country's affairs at all levels. Government plays a crucial role in forming, building, rebuilding, and transforming countries into ordered and organized. Various initiatives should be undertaken to provide a more and competitive compensation system in the government to improve economic well-being of civil servants and raise their morale, with a view to better service position. John Rawls (1972), justice is the first virtue of social institutions as truth is the system of thought. It enhances social, cultural, political and legal rights for prosperity, and development.

In the words of Knight Andy W. (2009) good governance demands the transparent and accountable management of human, natural, economic and financial resources. The ideals of governance and justice in the past to the present era are different in the name.

The economic development pushes backward if the weak rule of law and unresponsive justice system prevail in the country. Governance and justice face challenge if delays in resolving corruption cases, the high cost of litigation and the long arduous legal process. Poor governance and justice system have resulted diminution of public trust and confidence, and the presence of archaic laws and rules, and low funding support. Another factor affecting investor's confidence is in contractual obligations and the proper enforcement of property rights among domestic investors and outsiders or foreigners.

To create proper governance and justice system in the country, there requires the Alternative Dispute Resolution (ADR). The quick and prompt decisions continuously encourage and actively promote governance. The use of ADR provides speedy, efficient and prompt resolution of the disputes.

In the context of Nepal, Governance and justice in the ancient period laid in Dharma or Religion that played a vital role. Of course, the justice system of the Kirat period was based on Mundhum. All of them, including Kirats, and non-Kirats, Lichhavis non-Lichhavis, Malla, and non-Malla ruled the nation on Dharma. Mundum,

the holy scripture of Kirats, was a main source of justice system. As the *Twelve Tables* was popular in the Roman civilization, Mundhum in Kirats period was popularly practiced in Nepal. The Lichhavi kings were the source of justice. Dharmasastra, Rajagya, King's orders were the ultimate source of administration of justice in the country.

Before unification and after the unification of modern Nepal, justice delivery was based on Dharma and human-made law. The governance and justice system had been slowly integrated into a centrally administered national judicial system. The Hindu legal system and customary practices have more significant impacts among the people of Nepal and India, including SAARC countries. The Nepalese legal systems in the ancient and medieval period of the kingdom was absolutely directed by Manushmriti, Yagabalkya Niti, ManabNyayesastra, Shmriti, and the order of the Kings. The justice system had been administered under the religious, social, cultural, and moral rules and traditional values.

In the modern context of Nepal, governance is connected with the concept of the constitutional development and integrated into a centrally administered national judicial system. Nepal has entered the arena of the applications of constitutional development from 2004 BS to 2072 BS. William G. Andrew defines the constitutional government as a limited government regulated by the principle of the rule of law. The Constitution promulgation in different years such as 2004, 2007, 2015, 2019, 2047, 2063, and 2072 BS which have their own features. Many of the Constitutions of Nepal have failed not to adopt the notion of constitutionalism, that recognizes the necessity for the government to establish minimal government and delivers the liberal government system. Independence of judiciary, the rule of law, accountability, separation of power, non- recognition of minority rights, inclusion rights were not institutionalized. However, primarily the Interim Constitution 2063 BS to some extent included the notion of constitutionalism. The current constitution of Nepal 2072 BS has been promulgated to fulfill the aspirations of good governance, justice, development, and prosperity. Besides centrally integrated judicial justice system in the country, there requires the Alternative Dispute Resolution (ADR) for quick and prompt decisions that encourage people getting governance and justice.

The paper aims at disclosing the paradigm shift of governance and justice from the beginning till date. Justice is associated with social interactions that response the desired one. The social interactions bring the solution to a large number of people to response the minorities, women, Dalit, and indigenous people, especially socially, culturally and geographically disadvantaged groups. In the modern justice system, the constitutional attempts have provided equal shares for both private and public spheres of life and decision-making process.

## 2. Meaning and Definition of Governance and Justice

### 2.1. Governance

The word governance is derived from the Latin word 'Guernare' and the Greek word 'Kubernaein,' which means to *steer*.<sup>\*</sup> Governance terminology is not new rather as old as human civilizations. It was quite popular in Kausalya's Arthashastra. It has many variations. Some countries have good policies, but weak institutions, and others have reasonable institutions, but inadequate policies, yet others have neither.

Governance is not just about government. Governance is about a good society. It is a process whereby societies and organizations make important decisions. It refers to the whole economic, social, cultural, and political fabric of a country. Governance discusses how a society sets and manages the rules that guide policymaking, and policy implementation.

Harlan Cleveland (mid-1970), primarily used the word 'governance' in the public administration. What the people want is less government, and more governance. Power is now everywhere and appears to mean anything and everything. It is the structure of political institutions and the development of social capital, civil society, and high levels of citizen participation. Governance is inter-jurisdictional co-operation and network management.

It results from the interactions, relationships and networks between the different sectors (government, public, private sector and civil society), and involves decisions, negotiation, and other power relations between stakeholders to determine who gets what, when, and how. The relationships between the government, and other sectors of society determine how things are done, and how services are provided. Governance is therefore much more than government or 'good government' and it shapes the way a service or set of services are planned, managed and regulated within a group of political, social, and economic systems.

So, governance has opened a new intellectual space that is used to describe how a country is governed.

### 2.2. Justice

According to Plato, justice is righteousness, non-interference, and harmony. Virtue of the soul is justice. A just soul, in other words, a just man, lives well; an unjust cannot. Plato has treated justice as the bond which holds a society together. The Republic deals with the bond and true principle of social life.

Aristotle divided justice into two categories as distributive and corrective. Distributive justice is the duty of the state to distribute resources among its people emphasizing the

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<sup>\*</sup>*Sophal, Ear. (2002). Has More Aid Worsened Governance since 1995? Berkeley: Department of Political Science, University of California, 2001, p. 4*

fairness of the outcome of allocation based on income, wealth, job, opportunities, and welfare. And corrective justice is the court's duty to maintain fairness in the distribution process and provides remedies for the victim. The corrective justice means to send prison for the criminals or the jail. Therefore, in a just society, the rights secured by judge are not subject to political bargaining or the calculus of social interests. Bentham defines justice as the maximum happiness of the maximum number of people. The Code of Hammurabi declares that justice is to appear to the land by destroying the evil and the wicked so that the strong might not oppress the weak. For H.L.A Hart, justice as a shared concept i.e., everybody wants justice seen and done. For Ross, justice is the correct application of law as opposed to arbitrariness; by making decision based on rule and law of evidence and trial, not by mere personal suspicion or opinion.\* Dennis Lloyd (1964) defines justice linked with equality of treatment and undoubtedly owes much to the association of justice with legal-proceedings. Law is supposed to be applied equally in all situation, and to all without fear or favor, and the application of law without discrimination best embodiment of justice.

Modern jurist John Rawls defines the concept of justice with the principles of generality, universality, publicity, adjudicatory, and finality. Whatever the issues the judges must apply those principles in their decisions. For him, inequality is a reality, which is the result of the liberal capitalist system, and unjustly affects the poor or the weakest people in which the justice in the positive way of helping them to improve their condition. Equality should be maintained in each and every social order. Human beings have been wandering in quest for justice. The children, the disabled, and even the cattle maids are aware of some aspects of justice, and basic security. The poorest of the poor of society may feel that justice could be a right livelihood. They should not be paid less because of gender, and they should not have to wait longer at the bank, electricity office, and other public, and private institutions because of what they are wearing. They should be provided service fairly and impartially. So, the Constitution of Nepal 2015 has primarily addressed quota systems in education, health, politics, and several services. And also make the provision of ADR for conflict resolutions in prompt and speedy manners to settle the disputes. From the above perspectives, none of the concepts of justice could be accepted universally.

### 3. Brief Historical Overview

#### 3.1. Governance and Justice in the Ancient Period

Though Kirat and Mahishpal period written history was found rear, they discharged justices with the medium of Dharmasastra. The history of Nepalese law was

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\*M.D.A., Freeman. *Lloyd's Introduction to Jurisprudence*. (8<sup>th</sup> ed.). Thomson Reuters: 2008.

linked with the history of Nepalese state and law. Until 1178 AD, there were Gopal period, Mahishpal period, Lichhavi period and Thakuri period where governance was the instrument of the orders of the Kings. Kirat kings of the Mongoloid family administered justice as per the Mundhum – similar to those of the Hindu’s Veda, their holy scripture.

Several Shmritis, Nitis and Sastras were the greatest instruments after Kirats period. The Lichhavi period began in 250 B.C., which ruled in Nepal accordance with Dharmasastra, customary laws, Rajagya (king order), and Sanad (order on a specific topic). The kings were regarded as the fountain of justice and promoter of governance. They introduced a limited form of local self-governance system, which was known as Panchali stated by Nepalese Historians.\*The Kirat dynasty was followed by the Lichhavis, who ruled ancient Nepal until the end of the eight centuries. They originally migrated from Vaisali of Northern India, and assimilated themselves with the indigenous Nepali people of ancient Nepal. The Lichhavis were credited to have introduced the Aryan way of life, i. e. the Varna Vyavasta (caste system). They introduced the legal system based on Hindu Dharmasastra.

### **3.2. Governance and Justice in the Medieval Period**

During the medieval period, Mallas means wrestlers in Sanskrit, ruled, especially in Kathmandu, Patan and Bhaktapur cities before the unification of Modern Nepal in 1771AD. The downfall of Lichhavi dynasty in ancient Nepal was considered old era of Nepal’s history, and the starting point of the medieval era of Nepal. After the Lichhavi rule, Nepal was divided into numerous kingdoms. JayesthitiMalla’s contribution of *Manab Nyayasastra* (Code of Legal Rules for Human Justice) was one of the seminal written code before Napoleon code in France, which represented the beginning of the governance system in Nepal.

The Nyayabikashini was promulgated in 1437, which could be one of the oldest written law in South Asia, that was based on Naradha Smriti focused to Verna Bybastha (caste system). The entire justice system was based on Hindu Dharmasastra, religion, local custom, traditions, usages and Royal Edicts. The code of Manab Nyayasastra was entirely based on the concept of justice, where the criminal justice system was comprehensively written. Other legal provisions were strongly mentioned in the systematic forms in codified way. It does not mean that Nepal does not have any written law before the codification and the promulgation of the Muluki Ain.

Even in the statement of Prithivi Pal Malla, one of its kings of that period, found in a golden inscription that reads: “Only society respecting the value of justice could be

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\*Sangroula, Yubaraj “History of Nepalese Criminal Justice System: Some Milestones and Cracks” *Nepal Bar Council*. 2010. P. 13

a civilized society. The religion means justice and faith, and the king is not above the religion, and the justice.

From the above grounds, like the Lichhavi period, the medieval kings were depended on Smritis. As a remarkable feature of this period, several numbers of Smritis appeared as the leading sources, thereby ending the monopoly Manusmriti.\*Malla kings emphasized the need of decentralization in administration and justice. The codified law existed to operate the society having full of justice. The code mentioned in the Manab Nyayasastra are (a) Tulo (Beam Balance) (b) Agni (fire), (c) Jal (water) (d) Vikh (Poison), and (e) Kos (fast).

In the earlier period, King Ram Shah gave more attention to drafting rules and edicts (Thiti) on various aspects for running administration. His famous legend of justice as "Go to Gorkha if the Justice is denied" is still common talk among the people of Nepal. He developed the rules for the state's officials. Where he recognized the principle of natural justice in the administration of justice. Twenty-six Thitis indicated the interest of loan, accurate measurement system, preservation of roads, forests, and professions.

After the unification of modern Nepal, PN Shah followed the traditional justice system. The king should appoint competent judges to administer justice in their absence. Such system more or less was followed by the Muluki Ain 1854 which was promulgated by Janga Bahadur Rana in 1910 BS.

Thus, the medieval kings like Lichhavis used Hindu texts as authoritative sources of law. Manu Smritis, Yagavalakyay Smriti, Brihaspati Smritis, and Narada Smritis had been regarded as the most authoritative source of laws.

### **3.3 Contribution of Prithivi Narayan Shah, Builder of Modern Nepal**

Prithivi Naraya Shah, unifier and builder of modern Nepal, administered governance from the traditional legacy of JayesthitiMalla's Manab Nyayasastra, Dharmasastra, and Thiti of Ram Shah. PN Shah unified the country under the House of Gorkha in the 18<sup>th</sup> century and his successors conquered the small principalities made Nepal the powerful Himalayan Kingdom. The territory comprised the land between Tista and Kangada rivers, in the east and west respectively. The Sugauli Treaty of 1816, which ended Nepal's war with the British rulers in India, resulted in a heavy loss of territory in the south, east, and west frontiers of Nepal.

He not only kept internal management but also developed external relations with the Emperor of China and maintained a friendship with of English Emperor. His profound Dibhya Upadesh helped to govern the nation and reform judicial system. In one context,

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\*Regmi, Dr. Jagadish Chandra. *NepalkoBaidhanik Parampara (Judicial Custom of Nepal)*. TannerPrakashan: Kathmandu, 1979.

he said that King should provide complete justice to the people. Those who offer a bribe and accept bribes are destroyers of the justice and the great enemies of the state.

### **3.4. Commencement of Muluki Ain 1910 (Country Code 1954) in Nepal**

Until the codification of Muluki Ain in 1854, the Hindu scriptures, Thitis of Ram Shah, Manab Nyayasastra, several Smritis and Nitis had been treated as the best source of law. The historians and lawyers claim that Janga Bahadur was inspired by the Napoleon Code and designed to make codified law. Prime Minister Jung Bahadur Rana visited Europe in 1850. It is quite noticeable that he got the inspiration from propound legal code of Europe. The code was promulgated to provide equal punishment for the same crime. The administration of justice before 2007 BS was based on indigenous values.

To promulgate the New Muluki Ain, 1963 several sources were adopted especially Sanadas, Sawalas, Rukkas, Hindu Dharmasastra. The Muluki Ain 1920 BS had to give emphasis on the principle of “Equality before the Law”. It had made provisions for punishment without any discrimination on the basis of caste, sex, religion and greed. The equality before the law is declared to be the motto of Muluki Ain. Theoretically and conceptually they are mostly based on traditional and indigenous legal systems. And finally, the Muluki Ain, 1910 BS was a landmark Code for providing governance and justice in Nepal.

### **4. Governance and Justice System of Nepal (1951-1990)**

Though the history of the modern judiciary is very young as it started only after the success of the people’s Democratic Movement in 2007 BS. Before 1951, the operation of the inquisitorial system was prominent justice system. That means the court exercised the role of investigation together with adjudication. The judges had authority to discover evidence, and conduct a judicial inquiry before the sentence was passed. The promulgation of the Interim Government of Nepal Act, 2007 BS made several changes in the Nepalese legal system.

The appointment of Mr. Hari Prasad Pradhan, first chief justice of the Pradhan Nayalaya (Apex Court) was catalytic in importing principles of the Anglo-American approach of justice in Nepal. The Constitution of the Kingdom of Nepal, 1959 further accelerated the judicial system’s development to an adversarial process. So, foreign law reception started in Nepali territory in the modern time when the Pradhan Nyayalaya Act, 2008 was introduced. This Act had a historical significance in constitutional development. It was influenced by West-ministerial model of polity. Sir Ivor Jennings was invited to draft the constitution of the Kingdom of Nepal, 1959. The constitutional documents transplanted West-ministerial model of government. Previously Nepal had

inquisitorial or civil law case model justice delivery. Pradhan Nyayalaya Act, 2008 introduced the precedent and writ system in Nepal. Different Acts were commenced to establish justice as the Civil Right Act, 2012, Interpretation of Statute Act, 2010, Essential Goods Protection Act, Foreign Currency Control Act, respectively.

In 1962, a new constitution – the Constitution of Nepal, was promulgated which introduced two basic concepts, i.e. the sovereign monarchy and the Panchayat polity. In 1963 a New Muluki Ain replaced the Muluki Ain promulgated by Junga Bahadur Rana. The new code genuinely introduced a secular and universal code of law in terms of penal system.

The popular Mass Movement restored democracy in 1990 that results promulgation of the constitution. The Constitution of the kingdom of Nepal, 1990 safeguards the independence of judiciary. The Interim Constitution of Nepal 2006 brought fundamental changes in the legal system. And finally, the present constitution of Nepal 2015 has brought fundamental changes and declares Nepal as an independent, indivisible, sovereign, secular, inclusive, democratic, socialism-oriented, federal democratic republican state.

The Nepalese governance system in due course of time changes several legal and judicial matters on the grounds of the necessity of the nation. The several Acts including Muluki Criminal Code 2017, and Muluki Civil Code 2017, Public Procurement Act, 2007 and Public Procurement Rules, 2008 are the legal measures to regulate and control current legal issues. Prevention of Corruption Act, 2002 and Commission for the Investigation of Abuse of Authority Act, 1991 are the principal legislation in Nepal to control corruption.

The governance system of Nepal, in short, can be categorized into three different phases. The first phase was from the period of 1951 to 1990, the second from 1990 to 2006, and the third is from 2006 or the promulgation of the Constitution of Nepal, 2015. The **first phase** of 1951 was the democratic movement of the Nepalese people who overthrew the Rana family oligarchy at an initial stage. After this revolution, new form of governance started in Nepal. During the first phase from 1951-1990, several governmental mechanisms were established to govern the nation.

The **second** was the Mass Movement of 1990 and other series of events for governance was held in the period from 1990-2006. However, there remain many hurdles to have successful implementation. Corruption, long time sans elections in the local level, lack of political consensus among major political parties, ten years of Moist movement, interference of monarchy in the democracy, political instability, weak civil society, unemployment, unmanaged and unregulated private sectors, and problems in the bureaucracy were significant challenges.

The **third phase** of governance in Nepal took place after the democratic mass movement of 2006 and after the promulgation of the seventh Constitution of Nepal in 2015. During this period, Nepal has exercised several reforms in governance and justice. The Constitution of Nepal, 2015, Good Governance Act, 2064 BS, Local Government Operation Act, 2074 BS is applicable laws for the governance system. Article 27 of the Constitution of Nepal, 2072 BS, right to Information Act, 2064 BS, and Right to Information Rules, 2065 BS are statutory measures of Nepal for transparency and right to information. Besides centrally integrated judiciary system the Alternative Dispute Resolution (ADR) is going to practice for quick and prompt decisions.

### 5. Challenges to Governance and Justice System in Nepal

The significant challenges are corruption, security, politics, administrative, judicial, economic, socio-cultural, access to information, accountability and transparency, criminalization of politics, and unemployment. The reformations of all sectors in a limited time frame of such a shattered economy, and deficient infrastructure are the major trials. The eroded health care and dilapidated education system usually challenge governance and justice in societies.

**(a) Corruption:** The Prevention of Corruption Act, 2059 defines corruption means the abuse of entrusted power for private gain. Commission for the Investigation of Abuse of Authority Act, 2048 is the principal legislation of Nepal to control corruption. Nepal is also the member of the UN Convention against Corruption, 2003. Corruptions of public officials are investigated by the Commission for the Investigation of Abuse of Authority (CIAA). Corruption may be financial and non-financial gain. So, corruption is the first and foremost enemy for achieving governance.

**(b) Security:** Open border between India and China has been misused by terrorists, criminals, traffickers and unwanted elements. It has affected the peace and security of not only Nepal and India, but also the other countries of South Asia. Nepal has gone through several securities issues since the rise of extremist armed group and lack of the rules of law. Border issues, especially Nepal and India, where India shows big brother in every sector. India from 1973, onwards, has encroached the Nepalese territory Lipulake, Kalapani, and Limpiyadhura, which is more than 395 KM. So, Nepal-India open borders should be turned into a regulated system on a step-wise basis to address the challenges. It has to be agreed by both the governments for the benefit and security of both nations' people.

**(c) Political-administrative Challenges:** Though the Nepalese politicians themselves are not adequately educated, and visionary like the developed countries America, Canada, Britain, they have made provocative and populist politics. They refuse taking

suggestions of experts, academicians, researchers, geographers, legal experts, and civil society. They mostly spend time correcting and modifying their earlier regime without doing actual analysis. Political interference everywhere at various stages of decision-making and implementation has created a problem. Particularly, making a balance between the elected leaders and recruited administrators has become a significant challenge. Nepalese people since 2007 BS fought for democracy but it remains incomplete. The revolution of 1990, 2007 bought a new hope to the people, yet hopes and expectations of the people are not met. The two-third majority government attempts to create more effective governance and justice, however, ambitious politicians forget what they promise in their political agenda.

**(d) Economic Challenges:** Fewer saving and more consumptions, the government spends more and earns less, low education, import jumped, and export dropped, inflation, poverty, insufficient agricultural production, population growth, corruption, unemployment, economic growth, literacy rate, and income inequality are the major financial challenge. The major challenge is landlocked country. It is a fact that economic freedom is the fundamental right of every human being. They are focusing on traditional methods of production, depending appropriately to India, especially in fuel and even in agricultural products.

**(f) Judicial Challenges:** Justice is the end of the government. It should be provided timely, efficiently, impartially, and economically. Access to justice in Nepal is very far. It is very costly too. Nepal has three tiers of courts Supreme Court, High Courts, and the District Courts. Nepal judiciary has failed to deliver timely, and equitable justice, and has been complimented with the controversy of appointment, promotion or discharge of judges in an unfair, and biased manner. The dumped precedents hardly deliver justice to the people. The contradictory and ambiguity in decisions by the Supreme Court and other courts' decisions affect getting fair justice. Making delay justice and giving less importance to the Alternative Dispute Resolution (ADR). It is true that the quick and prompt decisions encourage people getting promote governance. The legal system of Nepal needs to be reviewed seriously with the principles of law and justice.

The Constitution of Nepal 2015 provides an independent judiciary, but appointment and promotion from the political quota system jeopardize the telos of judiciary. If judiciary is not independent, corruption and anarchy create a serious threat to the justice system.

Despite the challenges, since the ancient time till date, Nepal continuously maintains governance and justice in her ways. She has well-managed the transition of autocratic rule of Ranas, and Panchayat system to a liberal democratic via the youngest republican state. Moreover, legal reformation and its systematic transformation are required to be done in well-managed way. Governance and justice cannot be possible

only from the government sectors alone. Neither the independent judiciary nor the private sector can bring reform in it. Despite difficulties, the amalgamation of all three may bring reform and the paradigm shift in governance and justice in Nepal.

### **6. Conclusion**

Since the ancient period, the governance and justice have been implementing form the collective decisions. Until 1178 AD, there was the Kirats, Gopal, Mahishpal, Lichhavi, and Thakuri periods where governance was probably the instrument of King's orders and Dharmasastra. The king was said to be the representative of God, and his primary duty was to enforce law, and dispensed justice in accordance with divine law. Dharmasastras until 1178 AD, Manab Nyayasastra, 26 Thitis of Ram Shah, Dibbye Upadesh of Prithivi Narayan Shah and Codification of Muluki Ain of some parts until 1951 were playing a crucial role in forming development and justice. Most importantly the government handles conflict over interests and values than the other institutions in the society in better way then and now. Governance and justice system in Nepal from past to present makes a paradigm shift from Dharmasastra to the foundational indicators of each governance arena like civil society, political party, government, bureaucracy, economic society and Judiciary. The indicators of governance, and justice nowadays are freedom of expression, freedom of assembly, the rule of law, free and fair elections, meritocracy, absence of corruption, and impartial judgement. It is a paradigm shift in governance and justice system in Nepal where she discharged her justices from the centrally integrated judicial system and another Alternative Dispute Resolution (ADR). The use of ADR provides speedy, efficient and prompt resolution of the disputes. By providing equal opportunities to all and benefits to all can be made society just. Institutions, divisions of power, decentralization, periodic elections, an independent judiciary, capacity building, and other state characteristics are the foundation. So, governance is such a beautiful and unending catchy word that the poor and illiterates' kids worldwide are provided shoes, bags, dresses, books, copies, and free education. The response to needy one is the best system of governance. They bring the rule of law, accountability, transparency, free and fair election, independent judiciary and overcome the violence, conflict, unlawful activities in the world. Nowadays, governance and justice are a matter of globalization, privatization, localization, and the democratization process. Governance and justice are not only possible from the government or the judiciary and or the private sectors alone. It is incorporation and amalgamation of all three brings reform in the country.

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## Globalization, Citizenship, and Subjectivity in Self Construction

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### Abstract

*One of the profound questions that troubled many philosophers is– “Who am I?” where do I come from? ‘Why am I, where I am? Or “How I see myself?” and maybe more technically -What is my subjectivity? How my subjectivity is formed and transformed? My attempt, in this paper, is to look at “I”, and see how it got shaped. To understand self, this paper tries to show, how subjectivity got transformed or persisted over five generations with changing social structure and institutions. In other words, I am trying to explore self-identity. I have analyzed changing subjectivity patterns of family, and its connection with globalization. Moreover, the research tries to show the role of the Meta field in search of subjectivity based on the following research questions; how my ancestor’s subjectivity changed with social fields? Which power forced them to change their citizenship? And how my identity is shaped within the meta-field? The methodology of my study is qualitative. Faced to face interview is taken with the oldest member of family and relatives. The finding of my research is the subjectivity of Namita Poudel (Me) is shaped by the meta field, my position, and practices in the social field.*

**Keywords:** Globalization, Nation-State, Citizenship, Subjectivity, social field

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### Introduction

The past two decades of the twentieth century saw the concepts of self and identity move to the center of intellectual debate in the social sciences and the humanities. Sociological forces outside of the academy contributed to a growing concern with selfhood (Callero, 2003). An emerging sociological approach to the self reflects new emphases on power, reflexivity, and social constructionism. As a student of sociology, I think it is essential for me, to understand myself in order to understand, and analyze the social phenomena happening around me. Sociology is a fast-growing discipline. Sociologists are at work to bring into their range of study almost all aspects

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of human's social life. It deals with a person's social life on the surface of the culture, norms, values, economic system, political system, mode of production, social institutions, religion globalization, subjectivity, citizenship, nation, etc. Among them, in this paper, I will focus on how individual subjectivity is changing with globalization, and how citizenship matter in this process.

To understand individual subjectivity, this paper provides unique insight into family history. Also, it is important to know, how globalization, the idea of citizenship, and the nation-state reconstituted social fields. These papers provide more than the unique insight on the author's family, but also provide insight into the history of Nepal, and how its own subjectivity was shaped, reshaped by globalization with the state-building process. Through this paper, I want to present how the four sociological concept- Nation-State, Globalization, social fields, and the concept of citizenship have shaped and transformed or "persisted" the subjectivity of its "citizen". The period I will be covering is roughly from 1820 to 2017 almost 200 years. Not only because of the long period but also the unique nature of this period in history brings in-depth analysis of how the subjectivity was transforming from one generation to another. Where, each generation was undergoing rapid and radical changes under social, economic, and political dimensions. This period observed the consolidation of the nation-state, the experienced industrial revolution, expansion of colonialism to democracy, a massive explosion of population, and technological advancement. Moreover, this period is the witness to the rising globalization and dominated by the social concept like nation-state and citizenship.

Mostly the primary data has been collected during this study. During the primary data collection, several in-depth interviews were taken with my mother, grandfather's friend, and elder sister (fupu). In the interview, I have used the mobile recorder to record oral communication. Later, it transcribed and analyzed. Two-generation were involved in this communication. In course of writing, several theoretical articles were taken as a reference to the secondary data.

### **Exploring Globalization Citizenship and Subjectivity**

#### **Meaning of Globalization**

Globalization has been defined by many scholars in different ways. Globalization stretches social, political, and economic activities across political frontiers, regions, and continents. It also intensifies our dependence on each other through trade, investment, finance, migration, and culture increase (Held, D., et al., 1999). Jim Dator (See in reference) explains that historically, the speed and extent of globalization have increased with each change in modes of transportation and of communication. Moreover, globalization speeds up the world with new systems of transport and

communication means that ideas, goods, information, capital, and people move more quickly. It means that distant events have a deeper impact on our lives. Even most local developments may come to have enormous global consequences. The boundaries between domestic matters and global affairs can become increasingly blurred (Held, D., et al., 1999).

(Dator, J., et al 2006) again, describes in his book about globalization. The speed and ease of transportation have increased, and so the limitations of distance imposed by earlier technologies have decreased. Similarly, the inventions of speech, writing, the printing press, the telegraph, the telephone, the radio, motion pictures, television, satellites, computer networks, cell phones, and the World Wide Web each also increased the speed and scope of global communication, minimizing limitations of the earlier technologies and creating new social possibilities and problems.

We can explore our identity, our subjectivity by defining the central challenge of the global age rethinking our values in situations, and identities so that politics can remain an effective vehicle for human aspirations and needs. First, we need to understand what is distinctive about globalization today. We can do this only by studying the forms it has taken throughout history in all areas of activity the environment, the economy, politics, and culture. The thread that ties these things together is people, and so it is with the movements of people that we must start. (Held, D., et al., 1999).

Similarly, political sociologist Charles Tilly (Charles Tilly, 1997) said that “Globalization means an increase in the geographic range of locally consequential social interactions, especially when that increase stretches a significant proportion of all interactions across international and intercontinental limits. Tilly's definition calls attention to the fact that interactions involving globalization coexist with interactions that do not have an international or international character.

Therefore, globalization is synonymous with every day and everyone's life. The above reviews help me to understand the concept of globalization. Reviews show that it is about the connections between different regions of the world from the cultural to the criminal, the financial to the environment. Therefore, globalization, in this sense, has been going on for centuries, and we can also observe that globalization today is genuinely different, both in scale and in nature. It has a great connection with the nation-state structure. But, it does not signal the end of the nation-state or the death of politics, also it does mean that politics is no longer, and can no longer be, based simply on nation-states (Held, D et al., 1999).

It has touched everybody. People living in rural areas, semi-urban, urban, developed countries, developing, and underdeveloped countries. But, they are not untouched by globalization. People can't escape from globalization. On the other side,

globalization is shaping everyone's position and subjectivity in society. The below reviews help us to understand the concept of subjectivity.

### **Subjectivity**

The emerging direction of the contemporary theory is perhaps nowhere more evident than in the attention it lavishes upon the nature of the self-identity, and individual subjectivity (Elliot, 2001). Subjectivity is the condition of being a subject: i.e., the quality of possessing perspectives, experiences, feelings, beliefs, desires, and/or power. According to Mead (Mead, 1934), "it is by means of reflexiveness- the turning-back of the experience of the individual upon himself-which the whole social process is thus brought into the experience of the individuals involved in it." Subjectivity is used as an explanation for what influences and informs people's judgments about truth or reality. For Foucault (1982), the self is the direct consequence of power and can only be apprehended in terms of historically specific systems of discourse. So-called regimes of power do not simply control a bounded, rational subject, but rather they bring the self into existence by imposing disciplinary practices on the body (Foucault, 1982). From Foucault's perspective, the self is coerced into existence, not to become an agent but as a mechanism of control where a system of discourse works from the inside by creating a self-regulating subject. The Self at its most basic level is a reflexive process that regulates the acting, argentic organism. Subjectivity is an inherently social mode that comes about through innumerable interactions within society. As much as subjectivity is a process of individuation, it is equally a process of socialization, the individual never being isolated in a self-contained environment, but endlessly engaging in interaction with the surrounding world.

To summarize, as much as subjectivity is a process of individuation, it is equally a process of socialization, the individual never being isolated in a self-contained environment, but endlessly engaging in interaction with the surrounding world. Indeed, it is a new form we find an appreciation of the foundation of selfhood and more technically, understanding of the connection between self and social action.

### **Citizenship**

In its most legalistic construction, citizenship is a status that confers rights and imposes obligations. As a lived experience, however, it is less sharply defined. The ideas of democracy and citizenship that organically evolved in the ancient Greek city-states about 2,500 years ago, especially Aristotle (1941) have found their way directly or indirectly in the modern nation-states, with ample modification. It includes what T. H. Marshall famously termed social citizenship, a sense of belonging and active

participation as well as political citizenship, such as suffrage; and civil citizenship, the protection of rights (Marshall, 1950).

Citizenship has been defined in various ways. For some, it is the relationship between the political subject and the state. Others treat it as the ground of a critical distinction between citizens and aliens. Some view citizenship as the focal point for struggles over equality and inequalities. Still, others emphasize its foundational character in Hannah Arendt's much-cited phrase 'the right to have rights', or define it as 'being political' (Isin, 2002).

The modern conception of citizenship as merely a status held under the authority of a state (Isin et al., 2002). Citizenship always takes specific forms that are the outcomes of sets of processes, and are related to specific political projects, particular social contexts, and distinctive cultural configurations. Held (1993) mentions that "equality among citizens, liberty, respect for the rule of law and justice" as the main ideas of ancient Greek democracies that inspired the modern political thinking in the west. Citizenship is not merely the concept of an identity card is more a political concept. It is more related to the relationships between the people and its' nation. Citizenship the concept remained to keep changing with time. After 1950, Nepal has had a series of political movements, some armed, and others are peaceful. These movements gradually made the former Nepali 'subjects' into formal citizens. Nepal also embarked on an aggressive modernization drive through international development aid. However, as older social relations continue with little change, the previously subaltern subjects have turned into citizens but many remain subaltern citizens. Summing up citizenship is more than the legal status or can be explained as it is a mix up of political status, the feeling of ownership/belongingness, getting the formal protection from the nation in daily life, and inclusion in civic and social life from the nation/state.

### **The interrelationship between Globalization, Citizenship, and Subjectivity**

These three concepts are clearly linked with each other. We don't miss to explain the fields which are also part of this paper. Bourdieu says that highly differentiated societies are an ensemble of fairly autonomous, historically constituted, social microcosms which he calls fields. In analytic terms, a field may be defined as a network, or a configuration, of objective relation between positions (Bourdieu & Wacquant, 1992). A field consists of social groups and agents who have different species of capital-economic, cultural, social, and symbolic-which define their power and therefore their position in it (Bourdieu, P. & Wacquant. J., 1992). Individuals may have a different social field at the same time. For instance, the academic field is a social field for one teacher because he/she maintains all his/her network from there. Similarly,

he/she may engage in agriculture. In this context, a person swinging in two fields at a time.

Field has a great connection with globalization. Therefore, we can take globalization as a meta-field. Meta-field is the head of the other fields. Globalization affects directly the thinking, behavior, and working way of people because globalization allows a single person to an established business in different countries. Different countries provide a different environment, which forced them to change the behavior, thinking, and working way of a person. Globalization (metafield) sometimes provides an opportunity to change the social field too. We all are witness to it. For instance, we may have observed, a farmer son's is a doctor. The doctor's daughter is a teacher. The teacher starts business leaving his academic field. People are changing their social fields, but the meta field is playing role in it.

Meta field equally playing a role to change the concept of citizenship. Citizenship always associated with Nation and nationalism. Nationalism is identification with one's own nation and support for its interests, especially to the exclusion or detriment of the interests of other nations the technological revolutions in transportation and communications and international migrations have changed the old concept of nationalism. Similarly, the rise of various international organizations with International Monetary Fund (IMF), World Bank, World Trade Centre has transformed the "national economy" to the "world economy". There is more foreign population than the countries' citizens in some countries like Singapore and Macao due to free trade. In such a context, people are carrying dual citizenship, or visa of interest country. Therefore, people's identity (subjectivity) is changing/ transforming with their social fields.

Why the social field is changing from one generation to another generation? Because of Globalization. Due to technological and economic globalization, the world has been transformed into a village. The global economy needed people who could read write and had knowledge of the language or in other words, it needed a person with basic homogeneity. Thus an extensive investment in the education sector was made. Today though native culture, identity is brought forward, these are only superficial and the core entity to fix everything is not other than the economy. The globe is being homogenized due to the various causes along with the economy, education, and technology (Gellner, 1983).

In the same manner, the issue of citizenship has directly impacted on shaping individual subjectivity. When the nation-state was weak subjectivity was in accordance with this. There was not much difference in having or not having citizenship a few years ago. According to Marhsall (1950), the importance of citizenship has been increasing since the 18th century when citizenship was linked with various rights and

responsibilities. The notion of citizenship or the feeling of a citizen of a nation and feeling of right and responsibilities towards it has affected also the subjectivity of an individual. When the state started to protect its people, protect and promote the political, social, and other rights then it has affected directly to the people. So those who did not accept citizenship some decades ago are being incorporated into the state self or forcibly. According to Foucault (1982) from the 16th century, the state has been shaping the subjectivity of individual people through power.

It has been increasing the notion of citizenship in people by showing the greed for rights. More importantly, while the government started insuring rights and responsibilities to only its citizen then people were obliged to accept also the obligations and responsibilities set by the nation. Citizenship was a membership of a nation-state earlier but according to Isin and Turner (2002) now this definition has been changed. Now citizenship has become a member of a supra-national state. In place of the single citizenship concept of the 18th and 19th centuries, the double citizenship concept has been put forth. According to Isin and Turner (2002), citizenship is a globalized issue. There is no person is the globe without citizenship. A refugee has also been recognized by the UN. In this way, the globalized notion of citizenship has made an extensive effect on the subjectivity of an individual. Thus a clear interrelationship can be seen between globalization, citizenship, and subjectivity.

### **Exploring 'me' in my context**

My great grandfather was a priest. It is exciting to know that for me, he used to work in Rana Family, and my great grandmother used to work as a Nanny(Dhaiaama) Thousands of Nepalese citizens fight as soldiers for the British in World War I in 1918, my great grandfather was busy here offering goddesses and praying for life for them. He was dominated by the Rana's family that mean as an agent he is structured internally in terms of power relationships with some classes of the Rana Family. They had only one son and they died so early. Their son Mr. Ram Prasad Poudel tried his best to carry over his father's position or social field. Globalization speeds up the world with new systems of transport and communication means that ideas, goods, information, capital, and people move more quickly so this impact of globalization dropped on my grandfather, Mr. Ram Prasad Poudel. Dropped in a sense, globalization opens the door and provide him knowledge about outside of Rana Family, and outside of priest. Globalization pressured him to leave the unwanted social field. If he wouldn't have gained knowledge of the outside world, he had to stay, where his father was. He decided to leave his both social fields and subjectivity, which was linked with Priest's son. He didn't want to be called the priest explained by my fupu. Fupu further said that Ram Prasad Poudel even wanted to wear pants, a shirt not a dhoti kurta. Therefore, he

wanted to go somewhere, where no one knows him. He went to Krishnagar, west Nepal, and started to work and he changed the social field (Agriculture) and his position was Farmer. It was easy for him to change his own subjectivity because the community was new for him. The landowner used to practice the power on him and his subjectivity was under the control of the landowner. He spent around three years as a worker and when he got married to the daughter of the landowner, his position was changed. He married a single daughter of a landowner and he received all the property from his father in law as his father in law didn't have a son, fupu explained. Again, they are frustrated because they didn't receive the child even after four years of their marriage. Leaving their property to one of the wife's relatives, they came to Dhulabari Jhapa. According to Dinesh Niroula (My grandfather's friend), my grandfather was a priest in Jhapa.

Citizenship is a single legal status; it is a richer mix of legal status, the ability to have access to formal protections in daily life, and inclusion in civic and social life. So, carrying Nepali citizens, they were allowed to move within Nepal. Their social field was changed again. He started to work as a priest and this time he received very good respect from villagers and also started to trade between in Nepal and India as they were in Nepal-India Border. The notion of the subject is closely linked to our sense of self for the unique experience of who are and how we related to others. In our context, my grandfather subjectivity was changing sometimes priest, sometimes farmers, sometimes landowners, and my grandmother's subjectivity too. As Foucault's primary concern was to see how subjects are formed within specific historical situations through the operations of social instructions practices of inclusion, forms of knowledge. Here, we can observe the marriage system, a social institution, uses its power to increase the economic (Property) capital. According to my mother, they left the inherited property, but they keep buying land wherever they tried to settle.

As a first finding of how my ancestor's subjectivity changed with social fields has been described in the above paragraph. Secondly, I am moving towards, which power forced them to change their citizenship?

The geo-political considerations of India, more than economic or cultural reasons account for the continuation of 'open-border' between Nepal and India. This provides the most important context for Nepal-India migration. As a consequence of this process of globalization, when there is an open border for Nepal and India, my grandfather decided to move to Shillong with one senior priest. He again compelled to change his social field because he already started a business and became a trader in Jhapa. His subjectivity wasn't changed, yet his field was changing. He remained in Shillong as a "Gawala" (A person who sells Milk). While staying in India, he faced many difficulties,

so he decided to take Rasan Card as an Indian citizen. As a consequence, he became an Indian Citizen.

Furthermore, He found life easier in India in comparison to Nepal. The Indian state was slightly forward for facilities towards its citizen. His subjectivity is changed now with his social fields and as well as citizens too. He started his life in Shillong with his girlfriend (Extra Marital affair). When he bought a house, he decided to take his children too. After taking them back to Shillong, he provided Indian citizenship to his two sons and wife. Moreover, two sons completed education in Shillong and the elder son returned to Nepal. Elder's son applied for Nepali citizens because he wanted to settle in Nepal. He received government jobs in Nepal as a health assistant.

Additionally, he received both, Nepali government job, and citizenship. That's how, the structure, interrelated fields compelled to change their citizens from time to time. Series of circumstances proved that allow us to subjectivity is transforming with globalization and citizenship. The daughters who married Indian guys also changed their citizenship because marriage stands here with such powerful social institutions which compelled everyone to change subjectivity as per need. The daughters who married with Nepali guy also changed and received the Nepali citizen. How my identity is shaped with meta-field? I am much concerned with these questions. I went through the root. I am only one daughter of Mr. Madhu Sudan Poudel (Elder son of Ram Prasad Poudel). Well, my father had dual citizenship but when he received the government job in Nepal, he didn't use Indian citizenship.

His subjectivity now associated with health fields which were interlinked with other social filed such as education, politics even economics. His salary system linked with Nepal's unstable political field. Sometimes it went up and sometimes constant. My mother was a village girl but with the help of my father, she received a good education and started to work in the office as an accountant. Her field was different than her father explained by her mother, Toma Sapkota. And I am shaped according to them. They send me abroad and I got married in Australia. When I was in Australia, my subjectivity was totally different. My driving license, my student card all were controlled by the Australian Government. I was a student there in Sydney and I didn't receive any facilities as permanent residents receive. So my subjectivity or lenses to view me were different. Being a student, when I go to search for a job, the company often asked me are you a permanent residence of Australia? Associated subjectivity with students remained the hardest time for me. As a result, I wanted to get PR to change my subjectivity from international student to permanent residence of my Australia. When my family didn't permit us to stay in Australia, then I had to change my social field. But, I didn't change my subjectivity because I remained a student at Tribhuwan University. I returned to my country as my dad passed away, and my mom's

responsibility was upon me. I returned with my daughter, after completing my M.A and Mphil, I started to work as a sociology faculty in a private college. Now my filed is education and my position is sociology faculty. Still, I am doing the same job that's how I am shaped.

T. H. Marshall famously termed social citizenship, a sense of belonging and active participation as well as political citizenship, I belong to my country Nepal and my responsivity towards the nation is my participation. However, exploring my self-identity, where I am working now, (education field) is my social field. Apart from that, I am carrying another subjectivity that I am the daughter of Mr. Madhusudan and Toma Poudel. If I go to Dhulabari Jhapa, people know the daughter of my parents. If I go to my workplace people know me by my work. If I go to university, where I am pursuing my study, people know me as a student. There are many fields, and they are interwoven. I am also connected with particular field and this is my identity, I have so far accomplished my objective which was, to explore my identity, my subjectivity by defining the central challenge of the global age rethinking what values and what situations, which identities where politics can remain an effective vehicle for needs. To find out the changing subjectivity was another objective, where I followed the track of my ancestor's global, as a meta-field, it time to time control the other social field such as the education pattern of Nepal, Common property, mode of production, etc. This process helped to change citizenship to my family. My grandfather kept changing his social fields and he adopted different modes of production for subsistence. In every field, his subjectivity was different.

According to Nepali Nationality law, dual citizenship is not allowed. The constitutions of Nepal, strictly prohibited to accept other countries' citizenship for Nepalese citizens but people here are many with dual citizenship. Nepal also embarked on an aggressive modernization drive through international development aid which is a product of Globalization. However, as older social relations continue with little change. The subjectivity of the social field, the compulsion that peasant's son should be peasants or son of traders should be a trader is no more in time. Because of the changing pattern of subjectivity, we are in such an era where we are free to work as we wish. We are not forced to follow our ancestors' livelihood. The citizenship regime has had an impact on transnationalism in general and transnational migration patterns in particular.

### **Conclusion**

Summing up, many ruptures in social fields have been observed in the Poudel family so the author couldn't provide continuity to her ancestors' position. The author's ancestors' subjectivity changed with social fields because in search of social position. It shows that social position can be changed. For comfort, they change their

citizenship. Grandfather changes his citizenship from Nepali to Indian and father changes his citizenship Indian to Nepali. Therefore, social value, occupation, marriage, and kinship forced them to change their citizenship. I didn't observe continuity either in citizens either in social fields. Moreover, state restructuring impacts can be observed in family history from Ranaarchy to Democracy. My journey from village girl to international students, again new social fields, which provides enough preseason, how meta field is shaping the author's personal lifestyle. The world is becoming one village because of globalization. A few days before, I have received a phone from Canada. I am using a mobile bank to transfer my electricity bill and buying goods from amazon. My lifestyle is controlled by a smart watch, smart mobile, and bread in the breakfast. Isn't it the result of globalization? Yes, globalization (meta field) is shaping my social values, social position, and social fields. Now, who am I is acceptable to me but where am I is another question raised from this research.

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## Study of Variation of aerosols on High Mountain, Jomsom

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### Abstract

*The daily aerosol optical depth (AOD) data are derived from AERONET over Jomsom (lat.:28.47°N, long.:83.83°E, alt.: 2,700 m above sea level) for a period of one year 2012. Annual mean of parameters of aerosols are calculated. The effect of different physical as well as meteorological parameters on Angstrom exponential ( $\alpha$ ) were analyzed. Annual mean of Angstrom exponential ( $\alpha$ ), Angstrom turbidity coefficient ( $\beta$ ) and curvature of AOD ( $a_2$ ) are  $1.24 \pm 0.54$ ,  $0.05 \pm 0.04$ ,  $4.06 \pm 1.44$  respectively. Annual average of visibility is  $18.48 \pm 1.093$  km. Result of this research work is beneficial for the further identification, impact and analysis of aerosols at different places.*

**Keywords:** Aerosol, Angstrom turbidity coefficient, Angstrom exponential, curvature of AOD, visibility.

### 1. Introduction

Main source of energy of Sun is thermonuclear fusion reaction. A helium nucleus is formed by combination of four hydrogen nuclei by emitting 26.7 MeV energy.  $6.2 \times 10^{11}$  kg of hydrogen converts into helium every second. Sun radiates  $4 \times 10^{26}$  J energy per second. In form of electromagnetic wave of wavelength 300 nm to 3000 nm (Poudyal et al., 2011). Average solar radiation  $1367 \text{ W/m}^2$  (solar constant,  $I_{sc}$ ) (Duffie and Beckman, 2013) incidents on outer layer of atmosphere when earth is at mean distance  $1.49 \times 10^8$  km from Sun. As orbit of Earth around Sun is elliptical with eccentricity ( $\epsilon$ ), solar energy incident on specific point of outer layer of atmosphere at specific time is extraterrestrial solar radiation ( $H_0$ ). Extraterrestrial solar energy passing through the atmosphere is scattered and absorbed by molecules and particles. Solar energy interacts

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with large particle of atmosphere such as water droplets, dust and aerosols. So  $H_o$  decreases exponentially with extinction coefficient ( $K$ ) and optical air mass ( $m$ ) in atmosphere. By Beer Lambert's law, direct normal solar irradiance on ground ( $H_g$ ) is (Iqbal, 1983).

$$H_g = H_o e^{-Km}$$

Extinction of solar radiation is sum of extinction due to gas mixture, water vapor, ozone, aerosol and Rayleigh scattering. Extinction coefficient due to aerosol is aerosol optical depth (AOD). Aerosols is suspension solid and liquid particle with size 1 nm to 10  $\mu$  m. Both natural and anthropogenic aerosols influence three ways on the solar radiation: in direct way is by affecting the scattering and absorption of solar radiation, indirect way is by altering cloud microphysics and lifetime, and semi-direct way is by affecting cloud formation or evaporation (Kaufman et al., 2002; Ramanathan and Carmichael, 2008). One of anthropogenic aerosols, black carbon is emitted by vehicles and kilns, produces Green House effect. It melts ice on mountain. Vehicle also emits particular matter (such as PM10, PM2.5), are responsible for respiratory illness. Nepal is a land locked mountainous country with a large area covered by beautiful landscape in south East Asia. Nepal cover area 1, 47,181sq.km with length about 800 km and breadth about 200 km, divided into three geographical regions along south to north direction: Terai region (tropical zone), Hilly region (temperate zone) and Himalayan region (coldest zone). Within this small and beautiful setting it possesses diversity in biosphere and variation of climate. Nepal lies in sunbelt (latitude 15° to 35°). Annual solar isolation is 3.6 to 6.2 kWh/m<sup>2</sup>/day and 300 sunshine days in Nepal (Shrestha et al., 2003). In FY 2016/017, 538.6TJ energy is consumed in which tradition fuel is 73%, commercial fuel is 25% and renewable energy is 2% (MoF, 2016/017). 4,37,614 vehicle register in Nepal in BS 2074/075 (DTM, BS 2075). Large foreign currency is used to export petroleum product. Due to petroleum fuel based vehicle, air pollution increases. Nepal lies between two big industrial countries Indian and China. Study of aerosols is needed.

Jomsom (lat.:28.47° N, long.: 83.83° E, alt.: 2,700 m above sea level) is the center of Mustang district in Gandaki Pradesh of western Nepal. It has population 1,370 (CBS, 2011). It is hub to Upper Mustang Kagbeni, and Muktinath. The houses in Jomsom are designed to protect the strong wind (annual average wind speed is 5 km/h south west). These winds are caused by differences in atmospheric pressure between the Tibetan plateau and the lower part of the valley. Map of Jomsom is shown in figure1.

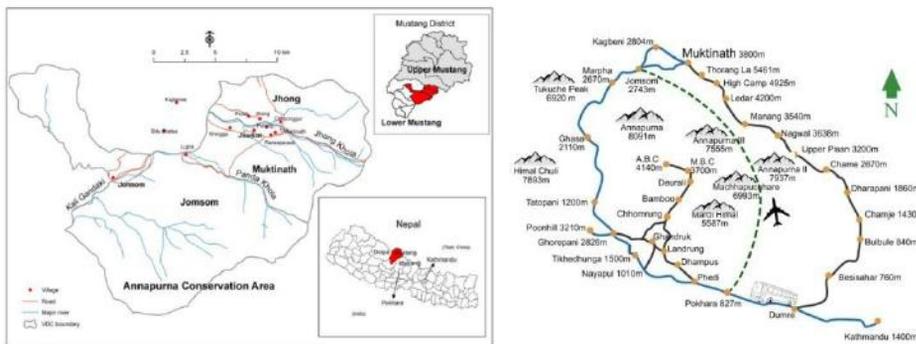


Figure 1: Map of Jomsom [source: Research Gate]

## 2. Methodology and material

Opacity of atmosphere for solar radiation is atmospheric turbidity. There various type of atmospheric turbidity index. Angstrom turbidity is one of index.

According to Angstrom relation (Angstrom, 1961) , AOD ( $K_{A\lambda}$ ) is

$$K_{A\lambda} = \beta \lambda^{-\alpha}$$

Angstrom turbidity coefficient ( $\beta$ )measures the aerosol concentration and scattering constituents other than Rayleigh. Angstrom exponential ( $\alpha$ ) is particle size distribution.  $\alpha$  and  $\beta$  are calculated by linear regression method. Spectral bands 675,500,440,380 and 340nmis used.

$$\ln(K_{A\lambda}) = \ln\beta - \alpha \ln(\lambda)$$

According to Koschmier (1924) (Koschmieder, 1924), visibility in km is

$$V_m = \frac{0.693}{b_{ext}}$$

Here  $b_{ext}$  is AOD for 550nm wavelength.

In Angstrom's formula, the errors in  $\alpha$  and  $\beta$  arises due to error in AOD and the choice of wavelength( $\lambda$ ).Then second order polynomial equation between  $\ln(K_{A\lambda})$  and  $\ln(\lambda)$  can be used to get precise information of aerosol size distribution(Schuster et al., 2006).

$$\ln(K_{A\lambda}) = a_0 + a_1 \ln(\lambda) + a_2 \ln(\lambda)^2$$

Here coefficients  $a_0$ ,  $a_1$  and  $a_2$  are constant.  $a_2$  gives curvature of AOD. It gives information about the domination of fine mode aerosols and coarse mode aerosols in the air.

The spectral aerosol optical depth data of Jomsom for year 2012 measured by CIMEL - 318 sun photometer are available in the AERONET homepage of Nasality is multichannel radiometer which measures direct solar irradiance. Spectral bands are 675 nm, 500 nm, 440 nm, 380 nm and 340nm.



AERONET's Cimel Sunphotometer  
 (https://aeronet.gsfc.nasa.gov).

**Figure 2:** CIMEL -318 sun photometer

Open source software Python 3.7 software is used to analysis data and plot graph. Mean standard deviation ( $\sigma$ ), correlation coefficient( $r$ ) are used as Statistical tool. Standard error (SE) is used as error bar in graph. Data is presented in form mean  $\pm$  standard deviation.

$$\sigma = \sqrt{\frac{\sum_{i=1}^n (x_i - \bar{x})^2}{n - 1}}$$

$$SE = \frac{\sigma}{\sqrt{n}}$$

$$r = \frac{\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_{i=1}^n (x_i - \bar{x})^2 \sum_{i=1}^n (y_i - \bar{y})^2}}$$

Here n is no. of data. Correlation coefficient is used to find relation between two variables. Its value ranges from -1 to +1.

### 3. Results and Discussion

Figure3 indicates daily variation of spectral AOD. Maximum value of AOD for 675 nm ,500nm,440nm,380nm and 340 nm are in 58th,90th,90th,90th and 90<sup>th</sup> day of year(DOY)respectively. Minimum value of AOD for 675 nm is in 165<sup>th</sup> and for 500nm,440nm,380nm and 340 nm are in 194<sup>th</sup> day of year(DOY). Smaller wavelength has large value of AOD. So radiation with smaller wavelength is absorbed more in atmosphere. That absorbed solar energy by atmosphere, are converts into radiation with large wavelength with is form of thermal radiation. That produces greenhouse effect. Statistics of those parameters are shown in Table 1.

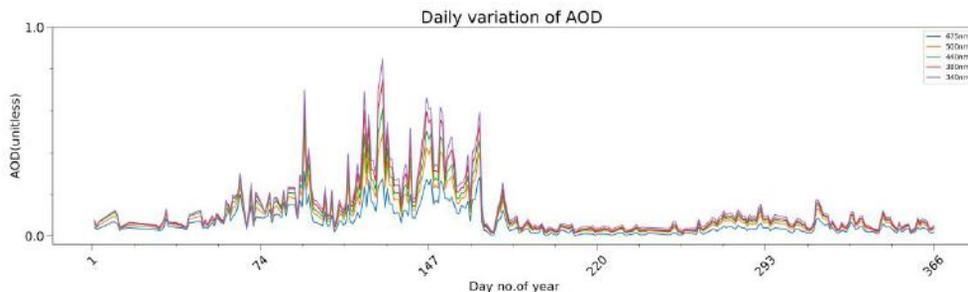
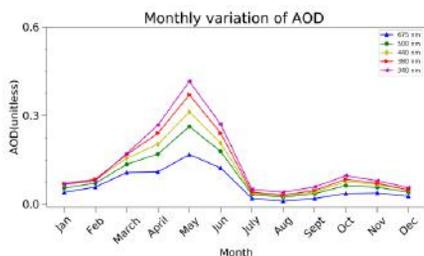


Figure 3: Daily variation of AOD

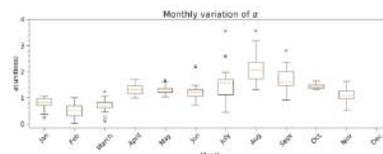
Table1: Statistics of parameters

Parameters	Max.	Min.	Mean	sd
AOD for 675nm	0.3105	0.0018	0.0677	0.0655
AOD for 500nm	0.4931	0.0112	0.1017	0.0984
AOD for 440nm	0.6106	0.0132	0.1198	0.1166
AOD for 380nm	0.7491	0.0125	0.1361	0.1400
AOD for 340nm	0.8505	0.0203	0.1513	0.1560

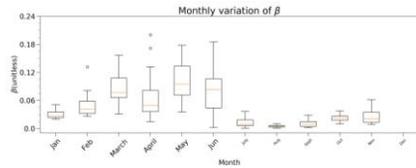
Figure4 (a) shows monthly variation of AOD. AOD for 675nm, 500nm, 440nm, 380nm and 340nm have maximum value on May. Smaller wavelength has large value vice versa. AOD for 675nm, 500nm, 440nm, 380nm and 340nm have minimum value on July. Figure4(b) shows monthly variation of Angstrom exponential( $\alpha$ ) .Maximum value of  $\alpha$  is  $0.78 \pm 0.53$  in August due to rainy season and minimum of  $0.52 \pm 0.26$  in February. Figure4(c) shows monthly variation of Angstrom turbidity coefficient( $\beta$ ) .Maximum value of  $\beta$  is  $0.10 \pm 0.037$  in May and minimum value of  $0.01 \pm 0.00$  in August. Figure4(d) shows monthly variation of curvature of AOD( $a_2$ ) .Maximum value of  $a_2$  is  $6.44 \pm 1.17$  in August and minimum value of  $2.82 \pm 0.49$  in March. Figure4(e) shows monthly variation of visibility. Maximum value of visibility is  $48.57 \pm 18.31$ km in August and minimum value of  $3.60 \pm 1.50$ km in May.



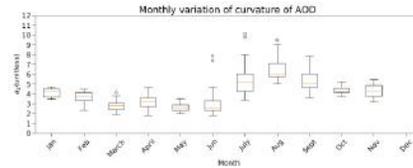
a)AOD



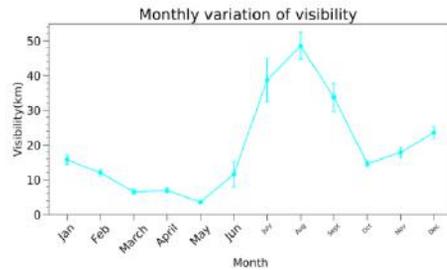
b)Angstrom exponential



c) Angstrom turbidity coefficient



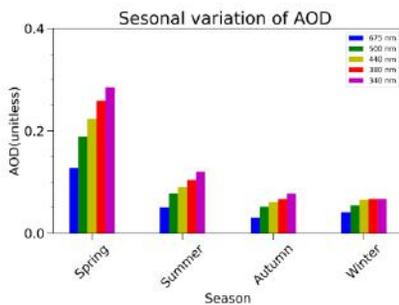
d) curvature of AOD



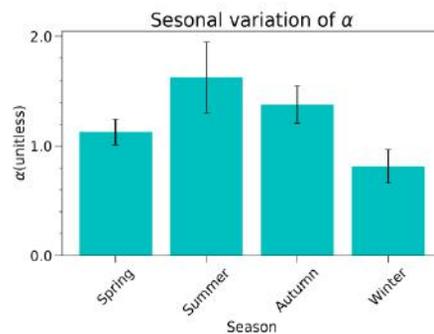
e) Visibility

**Figure 4: Monthly variation of parameters**

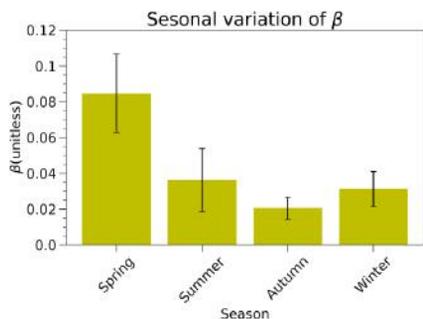
Figure5(a) shows seasonal variation of AOD.AOD for 675nm,500nm,440nm,380nm and 340nm has maximum value on Spring and minimum value on Autumn.Figure5(b) shows seasonal variation of Angstrom exponential( $\alpha$ ).Maximum value of  $\alpha$  is  $1.62 \pm 0.56$  in summer and minimum value of  $0.81 \pm 0.24$  in Winter.Figure5(c) shows variation of Angstrom turbidity coefficient( $\beta$ ) .Maximum value of  $\beta$  is  $0.08 \pm 0.03$  in spring and minimum value of  $0.02 \pm 0.01$  in autumn.Figure5(d) shows seasonal variation of curvature of AOD( $a_2$ ).Maximum value of  $a_2$  is  $4.88 \pm 1.47$  in summer and minimum value of  $2.83 \pm 0.50$  in spring.Figure5(e) shows seasonal variation of visibility. Maximum value of visibility is  $31.16 \pm 13.00$ km in summer and minimum value of  $5.57 \pm 1.95$ km in spring.



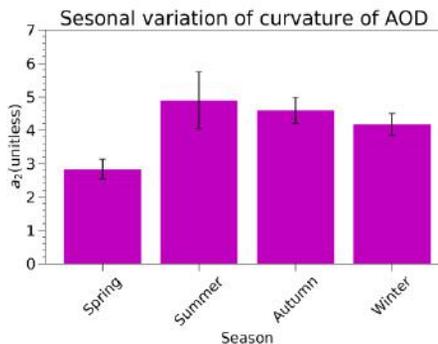
a) AOD



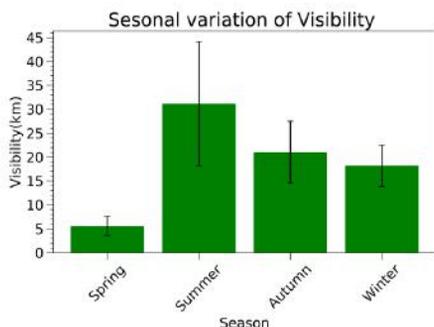
b) Angstrom exponential



c) Angstrom turbidity coefficient



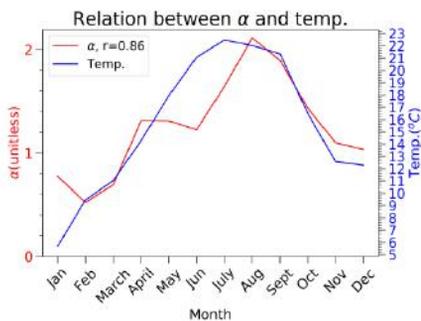
d) curvature of AOD



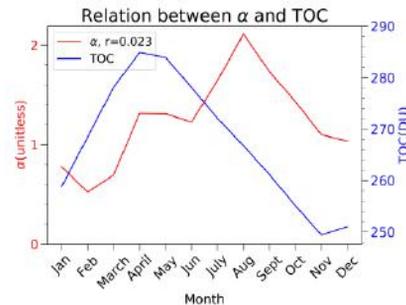
e) Visibility

**Figure 5: Seasonal variation of parameters**

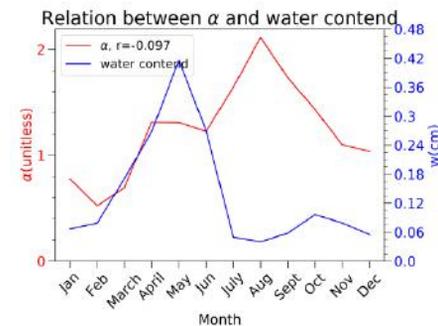
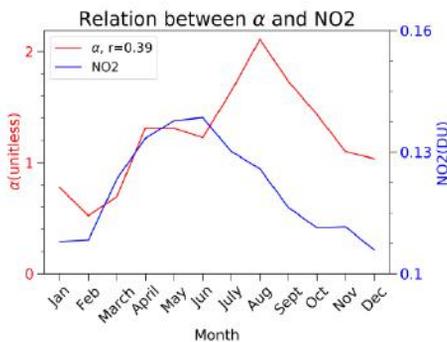
Figure6 (a) shows variation of Angstrom exponential ( $\alpha$ ) with temperature. Correlation coefficient is 0.86. Annual mean of temperature is  $21.2 \pm 4.1$ oC. Figure6 (b) shows variation of Angstrom exponential ( $\alpha$ ) with total ozone column (TOC). Correlation coefficient is 0.01. Annual mean of TOC is  $267.3 \pm 12.37$ DU. Figure6(c) shows variation of Angstrom exponential ( $\alpha$ ) with  $NO_2$ . Correlation coefficient is 0.3. Annual mean of  $NO_2$  is  $0.12 \pm 0.01$  DU. Figure6 (d) shows variation of Angstrom exponential ( $\alpha$ ) with water content. Correlation coefficient is -0.11. Annual mean of water content is  $0.80 \pm 0.6$ cm. There is no significant relation of Angstrom exponential ( $\alpha$ ) with TOC,  $NO_2$  and water content. But temperature affects the Angstrom exponential ( $\alpha$ ).



a) Temperature



b) TOC



c)NO<sub>2</sub>

d)water content

Figure 6: Relation of  $\alpha$  with of parameters

#### 4. Conclusions

In study period, the annual mean of Angstrom exponential( $\alpha$ ), Angstrom turbidity coefficient( $\beta$ ), curvature of AOD( $a_2$ ) and visibility are  $1.24 \pm 0.54, 0.05 \pm 0.04, 4.06 \pm 1.44$  and  $18.48 \pm 0.09$ km respectively for Jomsom. Angstrom coefficient of turbidity( $\beta$ ) found to vary from  $0.16 \pm 0.03$  to  $0.35 \pm 0.15$  from December 2011 to March 2013 in Kathmandu Valley (lat.:27.7°N, long.:85.5°E, alt.:1350 ma.s.l.) (Thapa et al., 2017). Those data show that Angstrom turbidity coefficient ( $\beta$ ) for Jomsom is smaller than that at Kathmandu Valley. So it is environmentally good place.

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## Socio-Cultural Dynamics of Pre-School Education in Nepal

Ritu Rupakheti\*

### Abstract

*The article 'Socio-Cultural Dynamics of Pre-School Education in Nepal,' explores the increasing trend of the Early Childhood Education (ECE) system in Kathmandu Valley, which is shaping the perspective of people on education, and in turn, the ways people's attitude is reshaping this emerging ECE trend. The gradual breakdown of the conventional education approach and adoption of new system is in the liminal stage. Unplanned introduction of such education borrowed from different cultural contexts seems to generate a complex, and sometimes conflicting response from society. The fieldwork of this paper was carried out at Ravibhawan of Kathmandu Metropolitan City. Two Montessori-based pre-schools from the Ravibhawan area were chosen for this purpose. It follows the anthropological inquiry with descriptive and exploratory approach. Participant observation and the narratives of the informants constitute the basis of primary information. Both key informant interviews, and informal discussions are employed to explore the emic perspectives of the concerned. Government documents and other relevant literatures are the source of secondary information. Purposive sampling is the main basis of informant selection.*

*This paper finds that there is a complicated and much-embedded relationship between pre-schooling, and the existing socio-cultural contexts of the communities. Several factors including the notion of family, gender roles, economic and social status, and the increasing global connectivity seem to be in complex interaction to influence the final choice of the parents. This study is a contribution towards the anthropology of pre-school education in Nepal. Despite the increasing importance of pre-school education, and its increasing trend in Nepal, anthropologists seem to be less interested in exploring this field.*

**Keywords:** early childhood education, pre-school, Montessori, culture, parenting

### Introduction

Nepalese education system is rapidly expanding, and striving to reach out to more population. The realization of the importance of quality education amongst people, and the subsequent increment of educational institutions of different modalities

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can be seen. Early childhood education is increasingly being popular amongst urban societies like Kathmandu valley. The pre-schools providing early childhood education seem to have recognized the need for partnership and collaborations with parents, which to some extent, has also contributed to change the perception of how knowledge should be provided. Many people believe that the pre-school students are well trained, active in extra curriculum activities, disciplined and confident. However, there are various concerns on the impact of these market driven foreign education concepts and methods in socio-cultural and economic domains of people's lives.

In the context of Nepal, Pre-school education came into existence only after the early 1950s era. Since then the education system has seen various changes and modifications. According to the Department of Education (2016), it is estimated that 34,335 Montessori schools are running throughout the country (Central Bureau of Statistics, 2016).

The objective of education is to facilitate changes in behavior, language, social values, and culture. Education broadens the horizon of the existing knowledge base of children, and helps to question the prevalent knowledge systems, cultural values and norms. This brings about production and reproduction of cultural systems. Reproduction due to '*aru kodekhasikhi*' (i.e. imitating others) is also significant in children's new surroundings. The cycle of reproduction is always dynamic, always in transition, and construction of new ones and deconstruction of the older ones is a gradual process in the society. Thus, it is impossible to think about a static and unchanging culture. I have explored why the notion of pre-school education has been changing, along with the subsequent increase in the number of early childhood educational institutions.

This paper is significant in bringing out the less discussed cultural connection of education system in Nepal. Bhatta (2009) cites G. Hilliard and states that 'the use of culture in education can be a vehicle of either liberation or oppression.' Despite such a linkage of cultural values for determining what kind of education is necessary in a community, only a few studies have been carried out in Nepal to explore and discuss the socio-cultural domain of education. Besides the existing studies on education, anthropologists seem less interested in anthropological exploring of the day-to-day experiences of parents and the education providers in Nepal.

The primary purpose of this paper is to explore the transformation of early childhood education, which is shaping the perspectives of the people on education, and in turn, the ways people's perspectives are reshaping this emerging ECE trend. The primary objective of this study is to explore the trajectories of emerging pre-school education system in urban area of Nepal. I want to analyze the factors behind parents sending their children to pre-school, and analyze why pre-school education system has been an agent of social change in Kathmandu valley.

The specific objectives are to analyze and understand the various socio-cultural, and economic factors and trajectories of early childhood education system in Kathmandu Valley, and to understand the changing notions of family, gender roles of parenthood through pre-school culture.

### **Methodology**

The fieldwork of this study was carried out at Ravibhawan, Ward Number 14, of Kathmandu Metropolitan City. Two Montessori-based pre-schools educating students from a diverse background - located within the Ravibhawan area were chosen for this study.

I am very close to my niece. I love to spend time playing with her. As she is enrolled in a pre-school, I often get a chance to visit her school, interact with her teachers, and observe her doing different activities. This also aroused my curiosity to explore pre-school education, and my niece became the first subject for observation and study. Hence, my research design is descriptive, comparative as well as explorative, to study the reasons of sending kids to pre-schools. I have described their social backgrounds in terms of class, caste, and gender. I met the informants through the snowball method.

This study has encompassed the techniques of anthropological inquiry, and has tried to bring out emic perspectives through the narrations and observations. Mostly, I have focused on the narration of parents and teachers relating their experience of pre-schooling captured by both the key informant interviews and normal discussions. Similarly, textual source included the review of government documents and other relevant literatures. I have tried to critically examine my questions, and maintain the diversity amongst my informants, selecting based on gender, class, caste, and education levels. The diversity was also maintained with the cross-sectional selection of parents, grandparents, teachers and children, from diverse cultural backgrounds. Bodily expressions, and other non-verbal gestures of the informants during the conversations and the interviews also helped me to contextualize this study in the particular socio-cultural space. It assisted in ensuring more inclusion, keeping in mind the operational concept of validity and reliability.

### One Facet of Education in Nepal

Lyricist Aavash and music composer Ramesh have created a beautiful song that expresses the sentiments of the children living in rural areas where access to education is difficult. Here is a Nepali song depicting the plight of kids from mountains, who are unable to attend school:

leka ka hami keta keti kuhiro vitra school chha,

chaurilai charaudai din bitchha padhnu ra lekhnu muskil chha.

(We are the kids from the high mountains, our school is submerged in the fog,

We pass our days grazing yaks, and it is not easy to go to study.)

hiunma koreko akchhyar ta ekchinma bilai jaijanacha,

dinvari hernucha gaibastu nahere bhalule khaijanacha.

(The letters written on the snow melts away quickly,

We need to tend our cattle through the day, or else the bears have them all.)

nagima udeko dhuwa ta badal banna jai janchha,

badal ko akshar akash ma dekhera yo man kalpanchha.

(The smoke arising from the rooftops move to become clouds,

And seeing the letters formed in the clouds, the mind imagines.)

kalam le lekhne man thiyo hiunle po aula khaidiyo,

kuiroma lukeko school le tadai basera chiyayo.

(We had desire to write with a pen, but the snow consumed our hands,

The school was peeping from far, hidden inside the fog.)

This song symbolically captures the situation of primary education in Nepal, depicting the hardships of many children who are not privileged to attend schools regularly. The value of quality education is understood by almost all, but what percent of children actually has easy access to quality education in Nepal. The Right to Education (Constitution of Nepal 2015, Article 31) allows everyone despite their caste, creed, culture, age, and gender to have access to basic education. There is a visible difference among education in urban and rural areas, and the differential needs of different cultures, groups and geographies seem to be ignored by the present education system in Nepal.

### Results and Discussion

Early childhood education has recently become a part of the discussion in national education policy. The government of Nepal has made pre-primary and primary education free aiming to provide basic education for all. However, systematic accessibility for all the population cannot be seen, rather mushrooming private sector-led, and urban-focused pre-schools have dominated the ECE in Nepal (School Sector Development Plan, 2016).

The transformation of the global phenomena of pre-schooling into the local level has brought several conducive and conflicting socio-cultural changes in society. Nowadays, priorities and motivations differ from people to people in sending their children to pre-schools. This study finds the increasing trend of sending young children to early education, which has also impacted some of the facets of ongoing socio-cultural and economic changes in the society. During my fieldwork, a housewife shared her story, *'Ke garnu hami ta Montessori padhauna sakdainau, tara sabaile pathaunchaan, saki nasaki pathaunai paryo ni alik sasto ma vayepani.'* (Everybody is sending their kids to Montessori. We cannot afford it, but are compelled to follow the trend, albeit choosing a cheaper school). This is the story of many low-income parents that I have interviewed.

There is a complicated and much-embedded relationship between pre-schooling and the existing socio-cultural contexts of the communities. Several factors seem to be in complex interaction to influence the final choice of the parents. The peer pressure to maintain social status in the neighborhood also seems to have a substantial impact on the choice of parents. One of the parents shared his story, *'hernus bahini aba yo ta fashion jastai vako cha, montessori napathaune manchhe ta aba kahi pani hudaina hola, sarkari vanda ta ramro pani chha ni'* (these days there are hardly any people who do not send their child to Montessori. It has become a fashion. But overall, it is also better than the government schools). This acceptance of private pre-schools by society reminds us of Gramsci's (1971) views on cultural hegemony. The changing values of the ruling class are changing the way we perceive education in Nepal. The new system of preschools has utilized - market forces, political influence, and consent from civil society - to establish itself as a dominant culture reflecting the socio-economic condition and values of the ruling class. As time passes, ruling class's new values are slowly inculcated as the common values of the mass, and are taken for granted. This is evident in how the government-funded education system is run, and also the increasing popularity of privately run education system. The major findings are summarized in the following themes.

### **Preference of Pre-Schools in Nepal**

Pre-schools have become a new culture in Nepali society. The globalization of educational trend has seemed to impact Nepali academic demand and its subsequent supply. Having an open economy gives access to all the worldwide nations to introduce various products and services to the global market, often affecting that nation's socio-cultural index. Although, globalization has a different meaning in different contexts, anthropologists have emphasized more on 'globalization as culture flows' (Edelman & Haugerud, 2004, 3). It has not only contributed towards change in education models,

but also brought about various unintended consequences. For instance, it has brought some change in our existing social and cultural norms on how we conceptualize education. In this line, Upadhaya (1997, 68-69), says, “Wealth alone does not confer social statuses, but that ‘social status can be acquired with wealth by giving a large dowry in the marriage of daughter, and sending sons to private engineering colleges.’”

Accordingly, for some people in Nepal, pre-school has become a way to showcase their social status and prestige. Similarly, business families are converting economic capital into cultural and symbolic capital through elite private schooling (ibid). These trends, as this study also shows, seemed to have some level of influence, on the middle-class families, in the form of their choice of preschools for their children. Ms. Sanu Amatya (child specialist), who is developing a new model of ECE known as *Nepalshowri*, says, “*Nepalshowri* is different than Montessori because people can learn Nepali culture such as the technique to peel off the cover of banana, egg and making them playthings from clay. It does not demand expensive equipment for games and also develops their palm. The main objective of Montessori is ‘grow with culture and learn with nature’ (*balbalika lai sanskar ma hurkau ra prakriti sanga sikau*). But it has not been correctly implemented due to the different reason. Ms. Amatya says, “Our culture is not to say ‘Hi’ and ‘Bye’ but to greet with *Namaste*.” However, developing a broad and yet culture-specific model of *Nepalshowri* can be challenging, as we are a country with many nationalities with various cultures.

### Expectations of School Management

Principal Ms. Shrestha putting forth her expectation from the parents, says that the parents have the wrong conception regarding childrearing. Parents are giving excess freedom to the child. Shrestha says, ‘It is true that we should not beat the child, but they should be controlled by other means. There should be some boundaries in freedom, and those boundaries have to set by the parents. There is no balance between control and warmth.’ The above views of the Principal resonate with the notion of power, as explained by Foucault. Discipline ‘makes’ individuals; it is the specific technique of power that regards individual both as object and instrument of its exercise (Foucault, 1984, 206).

Ms. Shrestha opines that the children need both love and control from parents. So, when parents understand this, it is good for the child and also for the teachers. She said, ‘*alikasi boundary rakhidiyo vane pachi gayera discipline ko kura ma problem aaudaina jasto lagcha* (if we set a little boundary then it will not be that difficult to discipline the children).’ According to Shrestha, parents are the foundation in the rearing and education of a child. She recollected a moment at her school during a cultural show, one of the parents asked her child to sing a certain song but, the child

wanted to sing a different song. The child started crying and I hugged him. I said to him that he could sing what he felt comfortable in. He remained silent for a while and, he sang another song. This attitude of parents, treating their child as an object and not as a person - asking their child to do specific acts in front of others '*yo gara tyo gara*' (to do this and that) - is a big problem in child development. They don't have any idea about what actually the child wants. However, in a different tone, she said that the development of the children and disciplining them depends on our culture, and it happens gradually. Parents are not being sensible enough while choosing school, as there are huge numbers of schools in the market. Parents need to have some information regarding this for the proper guidance, and well being of the child. This also helps to minimize the gap between the teachers, and the parents.

### Parents' Expectations

Most of the parents are educated, career-oriented and child becomes '*aljho*' (*hurdle*). As stated by one of the parent, Mrs. Neha KC (Himalayan Times, 16 May, 2016), 'Myself being a working woman, I was able to complete my studies and continue working as I was able to send my daughter to preschool. We are very satisfied and happy with her. Pre-schooling challenges the concept of housewives by providing the opportunity to explore and continue either studies or work, which makes them independent.'

The new trend has been challenging to the parents because they have a fear of conflicting values that the new system may impart. Parents think that if they teach their children in Montessori, they become confused as teaching is different at home from that of school. One parent shared their experience that their daughter teaches them saying 'A' sound with 'Aa', which is new for the parent. Parents are slowly learning about the Montessori education system through their children. I found that, parents also feel that they need to know the Montessori system so that their children will not be in confusion.

### The Paradox of Teachers and Parents

Although teachers have some knowledge about the Montessori methods but still, they are compelled to follow the traditional way of teaching. This is due to the competition of the schools in showing the graded performance of their students, and eventually attracting more students. Another factor, as stated by the teachers (and also some parents), is the demand of parents to intensely involve their kids in academic activities and keep them occupied with more homework.

When I attended a parent-teacher meeting, most of the parents were talking about homework: '*Homework lekhna mandaina runcha ani jhagda garcha*' (the child doesn't want to do her homework and cries'. To this query of the parents, the Principal replied,

*'bacha haru ko palm nai developed vako hudaina uniharu lai haat dukhcha, khas bachako lagi home work nai चाहिदaina, khelera sikne ho'* (children's hand are not fully developed to write continuously, they do not need home work, they learn through playing). It seemed that teachers were trying to follow the Montessori Method of teaching in which there is no need of homework and exam. However, many teachers expressed that, the school management at the same time tries their best to achieve the academic excellence of the children to compete with other schools. In this scenario, they are directly or indirectly persuaded by the school management to give some homework.

Expert Bidhyanath Koirala opines, 'Playing is both the 'Exam' and 'Home work' of children at this early age. *Bachha ko mul mantra nai play ho* (the main focus for the children should be playing).' According to Koirala, the current practice shows that both teachers and parents are responsible, in some ways, for overburdening the child with home works.

In some other cases, parents were also demanding some punishment to their children. They said to the teachers, *'Nepali homework garda runcha alik gali gardinu, alik jhagda garne vako cha'* (My child weeps while doing Nepali homework, he has also become quarrelsome. Please scold him a bit). The parents have a lot of expectations from young children. Teachers try to convince that homework and exam was not for the Montessori education system, but they were compelled to listen to parents' demand. Nowadays, children are information junky. They have various sources to gather information, but they are still obliged to follow the traditional way of teaching and learning methods. Between the different approaches of parents, grandparents, and teachers, children may find them confused and overburdened. Expert Sanu Amatya viewed that they should know that each child is different and each child has different set of skills which should not be compared. Almost all parents send their children at a very young age to school and bring unnecessary burden to children. Child psychology and education theory state that learning should begin with maturity. Prof. Koirala elaborated that learning without maturity is like injecting knowledge more than required.

### **Teaching and Learning Approach**

The Principal of a pre-school shared that they try their best to educate the children according to their needs employing appropriate psychological approaches. However, Child expert, Ms. Sanu Amatya said that, most of the pre-schools do not employ properly researched curriculum and pedagogy, and mostly depend on the rapid-fire short duration popular Montessori trainings, which they receive from the people who do not have required knowledge and skills regarding child psychology and child education. Similarly, parents have differing views regarding this. A father of a pre-

school child said that, in this highly commercial environment, it is less likely that the pre-schools hire qualified teachers. According to him, most of the pre-school teachers are SLC (School Leaving Certificate) passed or are studying in higher secondary, and only very few have done a proper academic courses on education. However, I found that, many parents to be indifferent with these issues. They were mostly concerned on whether their child learned to speak English.

As per Professor Bidhyanath Koirala, '*Sarkar le chayo khelera padhos, Private le chayo thelera padhos ra family le chayo jasari ni mero bacha le dheri janos ra ramro garos*' (Government seems to be carefree regarding education and wants the children to be educated whichever way they like. The private sector wants to push the students harder to show the better academic performance of their school. The parents want their kids to learn more, and be competitive). These kinds of differential priorities can jeopardize the education of children, making them vulnerable to the mismatched interests of these sectors.

### Security Concerns

Parents feel more secure if they know the teachers well, rather than looking at infrastructure or distance. A familiar environment for parents is an influential factor as they feel secured about their child. 'Nepali people make more distinction between 'them' and those people who do not belong to their inner circle. Those from the inner circle are perceived as reliable, while the others are seen as unpredictable.' (Bista, 1991, 97). In the same line, a parent said, '*Montessori rakhne vaneko chineko thauma nai ta ho* (we send our kids to those pre-schools which is runned by the people we know)'. Another factor they consider is the attitude of the owner or the managing teacher (Principal). A good educational environment and proximity do not always get priority over the familiar relations with the teachers or school management. Similarly, some parents also opined that the involvement of more female teachers and more female staff makes them feel more secured.

### Pre-school as a Common Culture

'The prevalent longing to make our children competitive and successful stems from the dominating trend of globalization and market economy.' says Bidhyanath Koirala. He said that we have not only kept the names of schools as 'White House,' 'Chelsea' or 'the Pentagon,' we are also desperate to show that we are a part of the shared global culture. It is very 'cool' to show that we are part of the worldwide white supremacy. However, Koirala admits that the trend of pre-schools has generated some level of consciousness amongst the parents in regard to different models of parenting and schooling. "This discourse can be a good start for the future of education system in Nepal," says Koirala with some hope.

### Conclusion

The growth of preschool in Ravibhawan of Kathmandu is embedded in both the local cultural contexts and the overarching globalization trends. There are many facets of this complex interaction. This study has come up with three main thematic areas, which have significantly impacted the growing pre-school trend.

Firstly, there are continuous confrontations and adjustments in the implementation of the emerging pre-schooling trend in Ravibhawan. These confrontations and adjustments are the product of existing cultural values of the community, and the new business model of early childhood education. Parents still want their children to be burdened with homework, which was the norm in the traditional approach. On the other hand, the pre-schools adjust their pedagogy to cater both the local demands of the parents, and also follow some early childhood development practices. Parents still want their child to be ranked first, second in the class instead of general grading. Schools want to save cost and attract more students. This can be related to one of the many facets of struggle and adjustments that happen in the complex cultural milieus where these negotiations take place. The result is the mixed way of teaching and learning approach, which encompasses both traditional aspirations of the parents and the new teaching pedagogy introduced by the pre-school system. Similarly, in most of the schools the curriculum was not prepared or approved by the experts, nor was widely brought into discourse, but instead largely depended on the training and personal interest of the school management. The schools argue that they follow the concept of learning by doing, and hence revise the methods and curriculum as the time demands. However, lack of standardization from both the government and the pre-schools, has created a situation of confusion amongst the parents in deciding what is appropriate for their children.

Secondly, due to the advent of globalization and gradual increase in the flow of ideas across the world, people are finding themselves subject to the trends brought about by this phenomenon. The advent of pre-school in Nepal is the result of this phenomenon. Similarly, the changing notion of parenting and gender roles can be seen in the ways working parents prefer to send their kids to pre-schools. Due to globalization and urbanization, Growth of unitary families has resulted in the lack of early childhood care at homes, thus the need to send the toddlers to pre-schools. Thirdly, parents come to know about the new pre-schooling trends from their children, kinship networks and other social networks. Many parents seem to feel secure when they are familiar with the school management and the teachers, due to the sense of kinship bond characterized by '*Aafno Manchhe*.' The decision of the neighbors and relatives creates a peer pressure to send the kids to expensive pre-schools. This social

trend seems to generate a sense of status symbol. It has become a matter of prestige to send one's kids to expensive pre-schools. The implication is that; the relatively poor parents find it increasingly challenging to meet this exuberant cost of maintaining their social status.

Despite the increasing importance of pre-school education and its increasing trend in Nepal, anthropologists seem to be less interested in exploring this field and global trend as well. Hence, this study is believed to be a contribution towards the anthropology of pre-school education in Nepal. The present paper opens up avenues to revisit the concept of 'education for all.' Education for all needs a broader critical evaluation, to include the voices and needs of the diverse socio-cultural contexts of the society. It would be much insightful to explore these voices and aspirations of the people from different cultural contexts, through further research works.

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## Meta Analysis on Pregnancy and Perinatal Outcomes of Pregnant Women with COVID-19

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### Abstract

*Covid-19' was originated from the Wuhan, China, in December 2019, and it was also named as 2019-nCoV SARS-CoV-2. The corona virus 2 (SARS-CoV-2) is a newly discovered ribonucleic acid virus which is identified from the patients with unexplained pneumonia and severe in acute respiratory syndrome. This Meta-analysis aims to evaluate the effect on pregnancy, perinatal, and neonatal outcomes of pregnant women with Covid-19. This paper is mainly based on secondary data sources. Data has been collected from the reviews of international and national publications, such as journals, reports, articles, and e-resources published in April to November 2020. A formal extraction protocol workflow was used to measure Preferred Reporting Items for Systematic Review and Meta-Analysis Protocol (PRISMA-P). The findings show that 2099 newborns (including twins) were born by 2093 pregnant women since the period of Covid-19. The result indicates that more than 74 percent of the pregnant women had given birth by cesarean section due to maternal Covid-19 complications and fetal distress. Most of the pregnant women have the following symptoms of Covid-19, such as fever, cough, dyspnea, pneumonia, respiratory distress syndrome, premature delivery, etc; and neonates often have the following symptoms: respiratory distress pneumonia, bacterial pneumonia, neonatal death, and Covid-19 positive. This paper concludes that the pregnancy and perinatal outcome of pregnant women and neonates were varied, and their manifestation can range normal, mild, and severe.*

**Key Words:** *human gestation, neonatal asphyxia, respiratory syndrome, reproductive health, perinatal resection.*

### Introduction

This paper attempts to explore the meta-analysis on pregnancy and perinatal outcomes of pregnant women with COVID-19. Novel Corona virus disease -19 is an emerging disease with a rapid increase in cases and deaths since its first identification in

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Wuhan, China, in December 2019. Corona virus disease 2019 during pregnancy related information or illnesses associated with other highly pathogenic corona viruses (i.e., severe acute respiratory syndrome and the Middle East respiratory syndrome) might provide insights into corona virus disease 2019's effects during pregnancy. Corona viruses cause illness ranging in severity from the common cold to severe respiratory illness and death (Rasmussen, Smulian, Lednický, Wen & Jamieson, 2020).

World Health Organization (WHO) (2020) argues that people who are non-white, older, and overweight and have a pre-existing medical condition are more vulnerable to severe disease due to Covid-19 and also more likely to suffer severe health complications due to Covid-19. Pregnant women with Covid-19 were more likely to give birth prematurely and 1 in 4 of all babies born to women with Covid-19 was admitted to a neonatal unit, stillbirth and newborn death rates were low.

Clinical retrospectively review for nine pregnant women with Covid-19 pneumonia result reveals that the maternal symptoms of cough, myalgia, sore throat and malaise, lymphopenia ( $<1.0 \times 10^9$  cell/liter) and fetal distress but the new born infants were tested negative for Covid-19 and there is no evidence of Covid -19 vertical transmission of mother to fetus (Chen, et al., 2020).

Nearly one-third of pregnant women with Covid-19 were hospitalized compared with just six percent of nonpregnant women. Pregnant women with Covid-19 were more likely to be admitted to the ICU and required mechanical ventilation compared with nonpregnant women. Among pregnancy 1.5% of pregnant women were admitted to the ICU compared with 0.9% of nonpregnant women; and 0.5% of pregnant women required mechanical ventilation compared with 0.3% of nonpregnant women (Ablow, 2020).

Yu et al., (2020) reported that clinical manifestations of pregnant women with Covid-19 were fever 86%), cough (14%), shortness of breath (14%), and diarrhea (14%). All patients had caesarean section within 3 days of clinical presentation with an average gestational age of 39 weeks plus 2 days. The overall outcomes of the pregnant women and neonates were good but one neonate was infected with SARS-CoV-2, 36 hours after birth.

Case-control study conducted by Li, et al., (2020) among 16 pregnant women with Covid-19 (Cases) and 18 pregnant women with suspected-Covid-19 (Controls) result shows that two pregnant women had vaginal delivery and rest were cesarean. Few pregnant women had respiratory problems as fever and cough but most of pregnant women had Covid-19 pneumonia none experienced respiratory failure during hospitalization. Eighteenth (18%) percent of pregnant women with confirmed Covid-19 had pneumonia and 16 % pregnant women with suspected Covid-19 had preterm delivery due to maternal complications which were significantly higher than in the

control group. In terms of the newborns, absence of Covid-19 infection and severe neonatal complications.

In United Kingdom, study conducted by Antoun, Taweel, Ahmed, Patni & Honest (2020) agreed that 22 pregnant women with Covid-19, the pregnancy and perinatal outcome was 65.2 % of the pregnant women presented mild, (8.7 %) of pregnant women presented moderate and 34.8 % of pregnant women presented severe symptoms. Among them 17.4 % (out of 19 pregnant women) developed severe adult respiratory distress syndrome complications requiring ICU support (4.3 %), (36.8 %) had preterm birth, 15.8 % developed adult respiratory distress syndrome before delivery, 10.5 % had pre-eclampsia and 84 % of patients delivered by C-section. Out of the 20 newborns, 18 were singletons with a set of twin. Among them neonate had bacterial pneumonia (one), Asphyxia (one) and were admitted to hospital due to infection and others were normal.

In India, Hassan, Muzamil & Banday (2020) claims that among 38 pregnant women with Covid-19 pregnancy and maternal perinatal (the period commences at 22 completed weeks) outcomes were 79% term delivery, 21% preterm delivery. The mode of delivery of pregnant women with Covid-19 were (60%) done cesarean section, (39.5%) were vaginal delivery, 2 pregnant women were risk of diabetes and 1 were risk of pregnancy induced hypertension, 1 mother was ICU admission and 1 died. In term of neonatal outcome were 26.3% of newborns had meconium (stool of fetus) stained, 29% newborns had fetal distress, 29% neonatal had ICU admissions, 13.5% had neonatal deaths, (2.7%) had intra uterine death, 2.63% had Vertical transmission, 2.6% had lab characteristics anemia, 21% had thrombocytopenia, 21% had SARS CoV-2 positive (by RT-PCR), 100% were presented with heart failure and shock at 17th day of life.

Similarly, in Nepal comparative observational study was conducted by K.C., et al., (2020) shows that the proportion of who had a complication during admission increased from 6.7% to 8.7% before and during lockdown ( $p=0.0126$ ). The proportion of women whose labor was induced increased by 17.1% to 32.1% before and during the lockdown ( $p=0.0001$ ). The proportion of women who had caesarean section increased by 24.5% to 26.2% before and during lockdown ( $p=0.0075$ ). The proportion of babies borned preterm (before 37 weeks) increased from 16.7% to 20.0% before and during lockdown ( $p=0.0016$ ). The institutional stillbirth (the death or loss of a baby before or during delivery) rate was increased by 14 to 21 per 1000 live births. The neonatal (birth to 28 days' baby) mortality rate was increased by 13 deaths to 40 deaths per live births before and during lockdown.

## Objective

The objective of this Meta analysis was to evaluate the pregnancy and perinatal outcome of pregnant women with Covid-19.

### Materials and Methods

**Design:** Meta analysis was done by using published national and international journals, articles and reports.

**Inclusion criteria:** The inclusion criteria of study were developed with carefully examined published national and international research articles, reports which were searched from the different databases such as Google, Google scholar, Pub med, and Hinari from April 2020 to November, 2020. The main focus was done on Pregnancy, perinatal and neonatal outcomes of pregnant women with Covid-19. The review was done only on; a) English language b) involved samples of at least 7 to 675 subjects c) eligible diverse research design

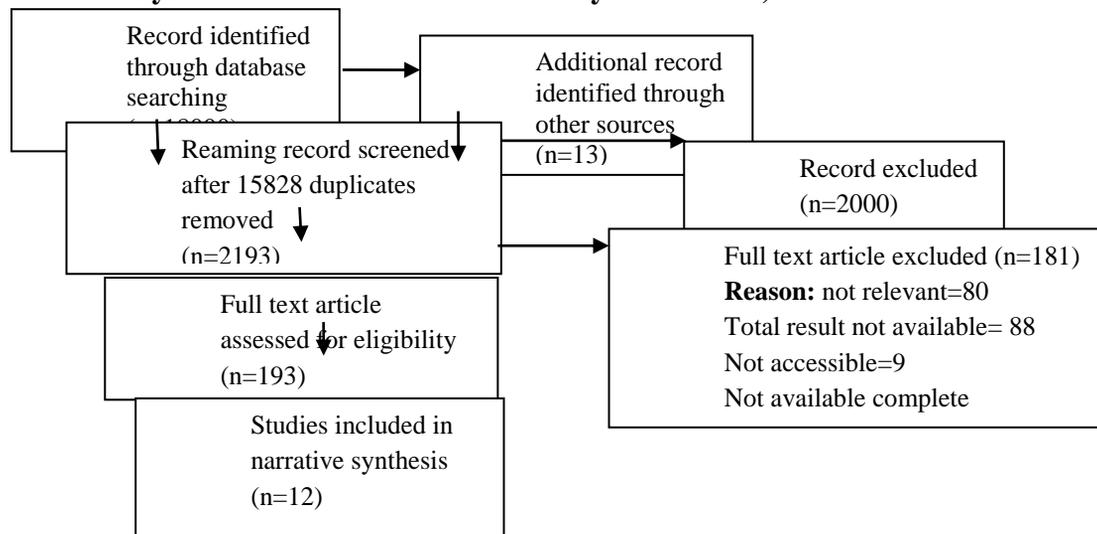
**Exclusion criteria:** The articles related to unreliable data, incomplete information, experimental studies and randomized trial were excluded from data.

**Search Strategy:** The research articles related on pregnancy, perinatal and neonatal outcomes of pregnant women with Covid-19 were searched for data purpose. During acquisition of data, key words were used as pregnancy, perinatal and neonatal outcome of pregnant women with Covid-19. Hand-searched (manual search) such as the reference lists of all identified studies and key journals in the related field was developed. About more than 193 reports were reviewed thoroughly and captured the required theme. The most common studies were pregnancy, perinatal and neonatal outcome of pregnant women with Covid-19: The preliminary analysis and searched article's study period was ranging from 2 weeks to 3 months and less than 1 year.

**Data Extraction, analysis and synthesis:** While searching, the main key words were used as pregnancy, perinatal and neonatal outcomes of pregnant women with Covid-19. The total searched articles were 193 which were published from December 2019 to November 2020. The search engines were Google, scholarly Google Pub med and Hinari through the internet database. A formal extraction protocol was developed as the PRISMA-P (Preferred Reporting Items for Systematic Review and Meta analysis Protocol) workflow which was used by Moher D, et al. 2015 that were checked and revised two or three times. Among 193 articles, 181 articles were excluded from the protocol for the following reason i.e. not relevant, unavailability of total result and incomplete result. Eligibility and inclusion criteria or content related topic of this analysis weren't provided. Only 12 full text articles related to Pregnancy, perinatal and neonatal outcome of pregnant women with Covid-19 were kept. The total sample size of 12 articles was 2093.

**Results**

**Result analysis of Meta analysis according to PRISMA-P (Preferred Reporting Items for Systematic Review and Meta analysis Protocol) as below.**



**Results of the reviewed Analysis:** Overall 12 articles were reviewed and analysis done. Meta analysis was done among 2093 pregnant women with Covid-19 and 2099 born neonates’ (including twins) pregnancy, perinatal maternal characteristics and neonatal outcomes complications. More than two third (74.16% or 1549) of pregnant women with Covid-19 reported cesarean section, less than one third (21.81% or 844) of pregnant women reported vaginal delivery and only least (4.02% or 12) pregnant women with Covid-19 reported spontaneous fetus loss in 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> trimester. The most common symptoms noticed on pregnant women with Covid-19 were fever, cough, dyspnea, pneumonia, severe respiratory distress syndrome, premature delivery, eclampsia, fetal distress, preterm birth, severe respiratory distress which led to ICU admission and ventilator support. The common symptoms of neonates were respiratory distress pneumonia, bacterial pneumonia, low birth, rash asphyxia, DIC, perinatal death and Covid-19 positive. Most of studies were shows that there was no vertical and horizontal study.

**Table 1**

**Meta analysis according to Author, Country, Sample size, design of perinatal outcomes**

Author	Country	study design/ Sample size	Pregnant women’s Prenatal outcome
(Liao, He, Gong, Yang, Zhou, & Li,	China	Comparative study /10 pregnant with	No significance difference in age, postpartum hemorrhage, perinatal resection between 2 groups.

2020).		Covid-19	
(Liu, 2020),	china	retrospectively reviewed/ 15 Pregnant women with Covid-19	Absence of aggregative symptoms, CT features of Covid-19 pneumonia and better recovery.
(Favre, Pomar, Musso & Baud, 2020),	China	Retrospective study/ 29 pregnant with Covid-19 positive	14 pregnant women experienced mild symptoms and 15 were free from symptoms of Covid-19. Eight had fever, 9 were coughing, 3 had shortness of breath, 2 had diarrhea, 1 had pregnancy related complication, 27 had done cesarean section,
(Blitz, et al., 2020)	New York, America	Case series evaluation/ 462 pregnant With Covid-19, but case seen on 70 pregnant women with severe Covid-19.	70 (15%) had severe COVID19, out of these 70 patients, a total of 13 (19%) were admitted to the ICU, (15%) died, and 11 (85%) were discharged. 7 women (54%) who delivered, 5 (71%) were urgent cesarean deliveries due to respiratory decomposition, 1 was an emergent cesarean delivery for cord prolapsed, 1 delivered vaginally & 4 (57%) preterm births.
(Prabhu, et al., 2020)	New York, America	perspective cohort study/ 675 pregnant women with Covid-19 & without Covid-19	10.4% were SAR CoV2 infection & 78.6% were symptomatic. <b>Cesarean section:</b> symptomatic 46.7%, asymptomatic 45.5% & without Covid-19 30.5%. There wasn't any ICU admission and maternal death due to Covid-19.
(Antoun, Taweel, Ahmed, Patni & Honest 2020)	United Kingdom (UK)	22 pregnant women with Covid-19	Presented Covid-19 symptoms: 65.2% mild, 8.7% moderate 34.8% severe. 19.4% severe respiratory distress so 4.3% required ICU support, 36.8% had preterm both and 84% delivered cesarean section.
(Knight, et al., 2020)	United Kingdom	Cohort study/ 427 pregnant women with	266 (66%) women gave birth or had pregnancy loss, 196 (73%) gave birth at a term. forty one (10%) women had admitted to hospital for

	(UK)	Covid-19, (3 group*)	respiratory support, five (1%) women died.
(Marin Gabriel, et al., 2020),	Span	descriptive study/ 242 pregnant women with Covid-19	26% of women delivered by cesarean section, 33% women had cough, 29.2% had fever, 46.6% of women delivered by prematurity.
(Zimmerman & Curtis, 2020).	China	Case series	Cesarean section was 88%, fetal distress was 31%, and preterm delivery was 38%, premature rupture of membrane was 12%, pre-eclampsia was 3%, abnormal umbilical cord was 3% and ICU admission and mechanical ventilator was 3%.
(Zaigham & Andersson, 2020),	Sweden	Systematic reviewed 108 pregnant with Covid-19	Maternal complication on 3 <sup>rd</sup> trimester such as fever was 68%, 91% of women had cesarean, 3 mothers were admitted in intensive care unit (ICU).
(Hassan, Muzamil & Banday 2020)	India,	Observational study/38 pregnant women with Covid-19	79% was term delivery & 21% was preterm delivery. (60%) done cesarean section, (39.5%) were vaginal delivery, 1 mother was admitted in ICU and 1 died..
(KC, et al., 2020),	Nepal	Perspective observational study 21760 pregnant mothers without Covid-19	Weekly birth was decreased 52.4% in Covid-19. Vaginal births 10 453 was observed over the study period with 8228 (78.7%) before lockdown and 2225 (21.3%) during lockdown. Cesarean section increased from 24.5% (n=3234) before lockdown to 26.2% (n=1879) during lockdown (p=0.0075).

**\*Total 11article's study populations were 2093 pregnant women with Covid-19 but Nepal study population was not included.**

**Table 2**  
**Meta analysis according to Author, Country, Sample size, Design of Neonatal outcomes\***

Author	Country	Design & Sample size	Neonatal outcome
(Liao, He, Gong, Yang, Zhou, & Li, 2020).	China	Comparative study /10 pregnant with Covid-19	All of neonate was Covid-19 negative.
(Liu, 2020),	China	retrospectively reviewed/	Covid-19 infection wasn't present in newborn babies.
(Favre, Pomar, Musso & Baud, 2020),	China	Retrospective study/ 29 pregnant with Covid-19 positive	Among 30 neonates, 18 were hospitalized for quarantine and care, 12 neonates were discharged with normal condition, 5 neonates were admitted due to covid-19, 12 were hospitalized with pneumonia with cough and 2 neonates had SARs-Cov2 specific.
(Zimmermann & Curtis, 2020).	China	Case series	Neonatal pneumonia (18%), disseminated intravascular coagulation (3%), asphyxia (2%) and 2 perinatal deaths. Four neonates (3 with pneumonia) have been reported to be SARS-CoV-2 positive.
(Blitz, et al., 2020)	New York, America	Case series evaluation/ 462 pregnant With Covid-19, but case seen on 70 pregnant women with severe Covid-19.	(57%) preterm births.
(Prabhu, et al., 2020)	New York, America	perspective cohort study/ 675 pregnant women with Covid-19 & without Covid-19	Absence of Covid-19 positive & placental pathology: fetal vascular malperfusion, thrombi in fetal vessels.

(Antoun, Taweel, Ahmed, Patni & Honest 2020)	United Kingdom (UK)	22 pregnant women with Covid-19/ Case Series	There was bacterial pneumonia in 1 baby , resuscitation & intubation was done in 1 baby and admitted special baby care Unit, 37% of severe Covid-19 mother's baby hadn't Covid -19 positive. There is no evidence of Covid-19 vertical transmission of mother to baby.
(Knight, et al., 2020)	United Kingdom (UK)	Cohort study/ 427 pregnant women with COvid-19	Twelve (5%) of 265 infants had positive SARS-CoV-2 RNA and six of them had Covid- 19 positive within first 12 hours after birth.
(Marin Gabriel, et al.,2020)	Descriptive study	Descriptive study/ 242 pregnant women diagnosed with Covid-19	Absence of infant mortality and no vertical or horizontal transmission was detected. 115 (46.3%) newborns were in neonatal unit, among them, 87(75.6%) had exclusive breast feeding at discharge & 40.4% of newborns had feeding at 1 month.
(Zaigham & Anderson, 2020),	Sweden	Systematic reviewed 108 pregnant with Covid-19	One neonatal death and fetal death.
(Hassan, Muzamil & Banday 2020)	India	Observational study/ 38 pregnant women with Covid-19	26.3% of newborns had meconium (stool of fetus) stained, 29% had fetal distress, 29% had ICU admissions, 13.5% had deaths, (2.7%) had intra uterine death, 2.63% had vertical transmission, 2.6% had lab characteristics anemia, 21% had thrombocytopenia, 21% had SARS CoV-2 positive, 100% was presented with heart failure and shock at 17th day of life.
(KC, et al., 2020),	(Nepal)	Perspective observational study 21760 pregnant mothers without Covid-19	Institutional stillbirth were increased 13/1000 live births to 21/1000 live birth and neonatal mortality were increased 13/1000 to 40/1000 live births.

**\*Total 11article's populations were 2093 pregnant women with Covid-19 but Nepal study population was not included.**

### Discussion

The finding of the Meta analysis reveals that 74.16% of pregnant women with Covid-19 had given birth cesarean section. Less than one third (21.81%) of pregnant

mother with Covid-19 had vaginal delivery. The common symptoms of pregnant mother with Covid-19 were fever, cough, dyspnea, and pneumonia severe respiratory distress syndrome, premature delivery, fetal distress, preterm birth. Similar systematic review conducted by Khan, Khan, Mustagir, Rana, Hugue & Raheman, 2020 result revealed that Covid-19 infected pregnant mother manifested common symptoms as fever (65%), cough (38%), fatigue (15%) and breathing difficulties (14%) where as neonatal outcomes as occurrence of preterm birth (29%) and low birth weight were 16.4%. Present analysis studies show that 26.3% of newborns had meconium (stool of fetus) stained, 29% had fetal distress, 29% had ICU admissions, 13.5% were died, (2.7%) had intra uterine death and 2.63% had vertical transmission where as similar meta analysis conducted by (Di Mascio, et al., (2020) shows that preterm birth was occurring in 41.1% of cases and perinatal death was 7.0%. None of the 41 newborns assess showed clinical signs of vertical transmission.

### Conclusion

This Meta analysis concluded that most of the pregnant women with Covid-19, the mode of delivery was cesarean due to maternal Covid related complication and fetal compromise. Severe respiratory distress led to ICU admission and ventilator support. The common symptoms of neonates were respiratory distress pneumonia, bacterial pneumonia, low birth, rash asphyxia, DIC, perinatal death and Covid-19 positive.

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## Cultural Capital and Educational Performance of Brahman/Chhetri Students

Sharad Chandra Simkhada \*

### Abstract

*Why Brahman/Chhetri students are high achievers in secondary education in Nepal is rarely analyzed. For their educational success, people attribute to their cultural capital. A qualitative method was employed to assess whether the assumption is valid or not. In the course of assessment, researcher generated information from secondary and primary sources and analyzed them. The findings show that the Brahman/Chhetris are rich in cultural capital, which is instrumental for their better performance in formal education. However, empirical evidence has led the researcher that the argument is valid partly. Due to globalization combined with other factors such as class, education, and growing cultural exchange, the influence of cultural capital to their educational achievement has been found weak. Therefore, the stereotypical generalization is not necessarily true at present, among the research participants.*

**Keywords:** cultural capital, educational performance, Brahman, Chhetri

### Context

Brahmans/Chhetris<sup>†</sup> are regarded mainstream groups in Nepal (Lawoti, 2010). He has claimed that after state consolidation led by Prithvi Narayan Shah of Gorkha, they are at the helm of mainstream state affairs. The documents of Ministry of Education (2009) and (2016) regard them as other groups and have considered few ethnic groups as marginalized. Foreigners and native scholars have high propensity to study ethnic groups. However, Brahman/Chhetris are among the least understood groups of people in Nepal generally (Chhetri and Gurung, 1999). They consist of over 30 percent of the total population of Nepal (CBS, 2014). In Nepal, caste hierarchy is predominant. The Brahman/Chhetri fall in the highest stratum of the caste hierarchy (Hofer, 2012). They are better educated than the members of other caste/ethnic groups (Shah, 1975; Bista, 1991; Caplan, 2000; DFID/World Bank, 2006; Acharya, 2007;

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<sup>†</sup> I have included Thakuris as well among them.

Stash & Hannum, 2009). They lacked adequate empirical data base to substantiate their claim. Analysing the data of Tribhuvan University and its few colleges, Bhatta (2011) has compared their total population (30.89 percent) with their enrollment in higher education that is 68.4 percent. This implies that their involvement in higher education is more than satisfactory level. They were among high achieving groups in the School Leaving Certificate (SLC) examination as well (Mathema and Bista, 2006). Simkhada (2012) carried out a field research of Sunachari School in Dhading and the people residing in its surrounding. On the one side, he developed the data of regular SLC graduates. On the other side, he carried out census of the people of the catchment areas of the school. They had better scholastic achievement. However, none of the study explained why they were more successful in school and higher education though social sciences aimed at explaining the reality in detail. Why they were ahead in educational mainstream was an intriguing question to the researcher. To quench the curiosity and fulfill an academic void, he carried out a qualitative research among them in order to bring out the grassroots reality during August –November 2016. This paper has tried to go deeper and examined whether the stereotypical generalization is correct or not.

### Objective

The primary objective of the research was to assess the generalization that the Brahman/Chhetris have rich cultural capital and therefore, they have better educational performance. Their culture is open to all but nobody has analyzed it vis-à-vis their academic performance. In this context, this study assessed their cultural capital and its contribution to their formal education.

### Method

The study was primarily qualitative. Review of literature, case study, participant observation, autobiography, two key informants interview (lawyers from *Dalit* and ethnic group) were some of the methods employed. The researcher used a concept of cultural capital elaborated by French scholar Pierre Bourdieu in 1977. He defined it in the Nepali context as participation in educational rituals, particularly *bratabandha* (the sacred thread wearing ceremony). Then, he defined students of 5-19 years from Brahman, Chhetri, and Thakuri community as Brahman/Chhetri students. Finally, he measured educational performance in terms of success or failure of the students in prescribed examination particularly the SLC or any board examination. In the beginning, he reviewed some books and documents to be familiar with the Brahman/Chhetri and their rituals related to education. He selected seven *vatuks*\* on the

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\*The boys being initiated.

basis of their participation in *bratabandha*. To know historical development of the *bratabandha* ritual and their reflection, he developed a cohorts such as a) initiated recently, b) initiated two-nine years ago, and c) initiated more than ten years ago. Similarly, he selected three parents of the *vatukas* for in-depth interviews. Finally, he interviewed three priests who had performed the role of *upaneta* (initiating role) for knowing an ideological root of cultural capital among research participants. The priests hinted that they were using some manuals. He bought the guidelines and reviewed thoroughly to know the cultural ideals and procedures. He observed practices using unobtrusive participant observation method. He was observing the ritual as an invitee. He noted down special issues that emerged during the study. He dug deep on the issues by using the case study method. The researcher is also a *dwija* (twice-born) as described by M.N. Srinivas (1956). However, he played a role of a stranger learner during the study. He classified and analyzed critical themes emerged during the research vis-à-vis his auto-biographical experiences during initiation or *bratabandha*. He reflected and analyzed the information to come to some conclusions. The researcher also carried out a field research in a school and its surrounding settlements. He analyzed the findings and has also presented them in this article.

### **Perspective to view the educational success or failure**

The researcher reviewed multiple perspectives in the course of being familiar with Brahman/Chhetri students and their educational attainment. For the last several decades, few scholars like Spearman (1927) and Herrnstein & Murray (1994), including conservative people, have emphasized that it is one's intelligence that makes a difference in schools, meaning that people are born with unequal intelligence and those who have more intelligence, achieve more in education. For them, it is pre-determined. Jensen (1972) - a bio-genetic theorist - argued that lower class children, especially blacks in the United States, suffered from a specific cognitive deficiency, an inability to engage in conceptual learning. This inability was a result of genetic inheritance. He was not optimistic about the likelihood that the academic performance of black children in the USA could be substantially improved despite social and economic policies as he believed that the root of the problem was biological. This explanation was later challenged by Ginsberg (1972), who demonstrated that children, black or white, possessed fundamental competencies in mathematical thinking and that there was no evidence of pervasive cognitive deficit.

Racial, ethnic, and class differences in intelligence quotient (IQ) test scores, were assumed to determine school performance. The differences in school performances were believed to have occurred due to differences in genetic endowment, differences in home environment and child-rearing practices, and cultural differences. Later studies

have indicated that these differences in intelligence are partly due to the cultural bias of IQ test questions, the conditions under which they are conducted, and cultural and family differences (Bowles and Gintis, 1976). Coming nearer home, the Brahmins/Chhetri are regarded smarter from birth by some people. From anthropological perspective, this opinion is ethnocentric. Therefore, more relative and value-neutral lens that highlight cultural differences have been developed. According to Bourdieu, schools reward students based on their cultural capital (Bourdieu, 1977). He concluded that those who were likely to perform well in schools were from 'superior social standing.' They possessed a specific 'cultural capital' such as the elite tastes, consumption patterns, skills, manners, and actions as 'intelligence.' The structures and processes that constituted the schools such as curriculum, methods of instruction, examinations, and disciplinary procedures favor them. He further argued that possession of such cultural capital leads to economic and social advancement because of its convertibility to economic and other capitals. For him, schools not only reproduced the dominant values and contents but also imposed symbolic violence on non-elite students. This implies that the Brahman/Chhetri students also possess a cultural capital that is conducive for their free, fair, and better performance in education. Different people may view their educational performance differently. Some people interviewed regarded Brahman/Chhetri genetically superior (by *prarabdha*). Even their claim that *purasartha* (human effort or nurture in the anthropological sense) was the underlying cause of their success in education. They had a good taste of study and therefore encouraged their posterity to education. As a conceptual tool, their cultural capital has been employed for critiquing the reality.

### Findings and analysis

Culture is the human-made part of the environment. It is binary opposite of nature. It is that complex whole which includes knowledge, belief, art, morals, law, custom and any other capabilities and habits acquired by human as a member of society (Tylor, 1871). The ways of nurturing or educating is also a component of the culture. Bourdieu (1977) envisions that cultural capital exists in three forms: in the embodied state, i.e., in the form of long-lasting dispositions of the mind and body; in the objectified state, in the form of cultural goods (pictures, books, dictionaries, instruments, machines, etc.), and in the institutionalized state. It, transferred over generations, possessed by group, families and individuals, is thus an important resource that contributes to an individual's educational success. Sullivan (2001) regards cultural capital as vocabulary and cultural knowledge while Bourdieu (1986) has operationalized it as linguistic competencies, mannerism, travel for education etc. DiMaggio (1982) operationalized cultural capital as children or parents' participation in cultural activities like going to museums, concerts, or taking an art class. Graaf, Graaf

& Kraaykamp (2000) has regarded cultural capital as reading habits of parents or literary climates of the family. Then, this concept has been a popular and frequent topic for academic discourse. The majority of them employed quantitative techniques for analysis. The quantitative analyses are criticized these days. In such an academic context, the researcher has regarded *bratabandha* and other rituals related to education an embodied and institutionalized cultural capital.

Two lawyers, one from *Dalit* and other from an ethnic group, claimed that Brahman/Chhetri were high achieving in education as below:

Do you know why Brahmans are high achieving? They teach three 'rs' and other manners to their wards from early age. We do not have book in our house but they often have plenty of books in their house. Their day begins with holy recitation and ends with academic discourse. Such an environment is conducive for their success in formal education. They can sacrifice their desires (*mojmasti*) and lead a simple and disciplined life. Therefore, they are forward in education.

*Manusmriti* (Chapter 1 Stanza, 88) says that to study (*padhnu*), teach (*padhaunu*), perform sacrifice (*yagnya garnu*), to encourage sacrifice (*yagnya garaunu*), donate (*dan dinu*), and receive the donation (*dan linu*) are six prescribed professions for the Brahman (Chaturbedi, 2002). Thus, Hindu scriptures and practices have accorded high priority on rigorous education from time immemorial. They were not allowed to do other economically rewarding jobs. In Sunachari, the majority of the Brahman/Chhetri were farmers for instance. This reality was not in harmony with their conventional provisions of the professions. A few people had been the priests. Due to education, diversification in their occupations, and globalization, significant changes occurred in their commensal rules. The patron-client relationships they have been maintained customarily had also been weaker.

Before analysing their cultural capital, a brief introduction of the Brahman/Chhetris is required. Hagen (1998) termed Indo Nepali groups to denote the Brahman, Chhetri, and Thakuri, including others. Etymologically, the term Brahman is derived from the *Brahma*. One who knows *Brahma*\* is a Brahman (Environment and Sanitation Section, 2002). Though there exist variations, the Brahmans are superior in Hindu caste hierarchy, which is followed by Chhetri (Chhetriya) and Thakuri meaning warrior who protect people or place. All of them are Caucasoid in physical features. However, most of the Brahmans are in-born<sup>†</sup> Brahman who are not Brahman by

\*There are three kinds of Brahma viz. *shabda* (word), *para* (knowing inter-subjectivity) and *purna* (perfect know all). Those who know meaning of the words are more in number while those who know *para brahma* are a few like Narad (a famous sage) and it is hard to be *purna brahma* (like Krishna).

<sup>†</sup>But in a Sanskrit stanza goes like this:

जन्मना जायते शुद्र कर्मणा द्विज उच्यते  
वेदपाठी भवेत् विप्र ब्रह्म जानाति ब्राह्मण ॥

definition at the moment. They are called *Bruwa*, Brahman beyond *Brahma*, or deed and culture (meaning nominal Brahman). There are varied Brahmans viz. *purbiya* (eastern), *kumai* (those who are from Kumaon, which is now situated in Uttar Pradesh of India), and *jaisi* (this term is derived from *Jyotishi* meaning astrologer). Tarai and Hill Brahmans are also their broad categories. Different septs (*thara*, like Khanal, Bhandari, Timsina, Nepal, Dahal, etc.) come within each subgroup, who have distinct cultures. Thus, Brahman is a constellation of heterogeneous cultural groups\*.

Brahmans, *Jaisis* and Chhetris, are designated as *tagadhari jat*, which implies that they are high Hindu castes. In common parlance, Brahman and *Jaisis* are denoted by *Bahun*s while the three groups together are termed as *Khas Bahun*. They wear sacred thread (*janai* or *taga*), a symbol of their high ritual status (Caplan, 2000).

All Brahman Chhetri reside throughout the country since different times after they came from Sindhu Valley. Therefore, they were labeled Hindu by the Muslim people in Arab because they could not pronounce “s”, and “h” sound is heard instead. Some of them are indigenous groups and influenced by Hindu civilization later on. The civilization initiated by different sages has been perpetuated since 3,000 B.C. According to Subedi (2013), one of the hallmarks of these groups is their elaborate cultural practices viz. *sora sanskaras* (16 life cycle rituals<sup>†</sup>). Among them, tenth, eleventh, twelfth and fourteenth rituals are directly related to education which are dealt in brief in the following paragraphs:

### **Vidyarambha**

*Literally, Vidyarambha or Akshararambhasamskarais* abeginning of reading and writing alphabets and numbers. It is performed at the age of five and is necessary before commencing Vedic study - *Vedarambha*. On the day of the ritual, the child is bathed and asked to sit facing the west, while the *Acharya* (teacher) sits facing the east. With pen, the child is encouraged to write phrases such as Salutation to Ganesh (the god who

By birth, everyone is a *Shudra*. If s/he follows prescribed deeds by Hindu Scripture, he is called *dwija* (twice-born). If one can recite Vedas, s/he is called *bipra*. One who knows *brahma* is a Brahman.

\*Brahman do not view themselves as a group, according to Gil Daryn in his article “Bahuns: Ethnicity without ethnic group” published in Lecompte Tilouine and Dollfus (Eds.) *Ethnic Revival and Religious Turmoil: Identities and Representations in the Himalayas*, 2003. Pp 161-173. New Delhi: Oxford University Press.

†(1) *Garbhadhan* (Conception), (2) *Pumsavana* (engendering a male child) (3) *Simantonayana* (Hair-parting), (4) *Jatakarma* (Birth rituals), (5) *Namkaran* (Name-giving), (6) *Nishkraman* (First outing), (7) *Annaprashan* (First feeding), (8) *Chudakarma* (Shaving of head), and (9) *Karnavedha* (Piercing the earlobes). (10) *Vidyarambha* (Learning the alphabet), (11) *Upanayana (Yagnopavit)* (*Sacred thread wearing ceremony*), (12) *Vedarambha (Beginning Vedic study)*, (13) *Keshanta* (Shaving the beard), (14) *Samavartana* (End of Studentship), (15) *Vivaha* (marriage) and (16) *Antyesthi* (Death rites).

bless one to overcome hurdles), salutation to Saraswoti (goddess of knowledge), salutation to family deities and salutation to Narayan (an incarnation of Lord Vishnu who protects all creatures) and Lakshmi (goddess of wealth). The child then writes, *Om Namah Shivaya* (salutation to Lord Shiva). He then presents gifts to the *Guru* or *Acharya*. The *Acharya* then blesses the child. The practice was/is related to *Gurukul*. Now, the children are enrolled in schools to begin reading and writing.

### ***Upanayana***

After eight years, the son of Brahman/Chhetri is initiated by the *Acharya* with a sacred thread, known as *jani* or *yagnopavit*. Amongst all the foregoing *samskaras*, this is the most important for education. It is the dawn of a new life. Hence, the child becomes *dwija* (the first biological birth while after the ritual he is regarded born as a member of their culture. Therefore, *Upanayana* or popularly known as *bratabandha* is the second birth). The child enters studentship with a life of perfect discipline which involves *brahmacharya* (state of celibacy) at or around the premises of the *Acharya*.

### ***Vedarambha***

This *samskara* is marked when a boy starts studying Vedas - the apex Hindu scriptures. The provision of *Vedarambha* is missing in the earliest list of the Dharma Sutras. It seemed that though *upanayana* marked the beginning of education, it did not coincide with Vedic study. Therefore, a separate *samskara* was felt necessary to initiate Vedic study – a specialization course. In this *samskara*, each student, according to his lineage, masters in one or four Vedas. During this course as well, he continues *brahmacharya* and lives in strict continence and austere discipline.

### ***Samavartana (End of Studentship)***

Generally, the boy is graduated at 25 years. After graduation *Samavartana Samskara* is marked. 'Sama- vartana' means 'returning home from the house of the *Acharya*.' This involves a ritual sacrificial bath known as *Snan*. It symbolises the crossing of the ocean of learning by the student - hence *Vidyasnaatak*. In Hindu scriptures, learning is compared with the prowess of swimming in an ocean. One who is skillful to swim is called a *snataaka*, a graduate.

The boys undergo through four stages of life viz. *brahmachari* 8-25 (*chaste student*), *grihastha* 26-50 (married householder), *vanaprastha* 51- 72 (a forest life with or without wife) and *sannyasa* 72 + (the ascetic life when all worldly materials are renounced). Broadly, after completion of the studentship, one can lead one of two ways of life: *prabriti marga* (life of a married householder) or *nibritti marga* (ascetic life). However, student life is mandatory for both ways of life (Subedi, 2013).

*Bratabandha* (a disciplined life) is a specific and elaborate cultural practice long cherished by the Brahmans/Chhetris which is distinct in comparison to other caste/ethnic groups. The prescribed activities like wearing sacred thread (*janai lagaune*), hearing the *Gayatri Mantra* - a three-line verse from the *Rigveda* – and other stanzas of *Veda* from the *Acharya*, leaving the parental home and going to other places (*deshatana*) for study and returning from the other places after completing the study (*samavartana*) are the major steps of *bratabandha*.

Similarly, on the sixth day after the birth of a baby, *chhaiti* is celebrated among them. According to a myth, on the day, *bhabi* (the goddess of fate) writes the child's fortune on his/her forehead. A pen, book and copy are kept nearby pillow of the child. A lamp is kept burning all night so the goddess can see to write out a long future for the child. In the *chhaiti* as well, their emphasis on education is manifested (Bennet, 2002). *Saraswoti puja* is another similar festival which has something to do with education of the group. It falls between the end of January to the first week of February each year. It is a fifth bright moon day (*basanta or shree panchami*) according to Nepali calendar. On the day, the *Saraswoti*\* (goddess of knowledge, music, art etc.) is worshipped by the Brahman/Chhetri. It is believed that if she is happy, she will bless the person and consequently, one can get success in education.

Above-discussed culture diffused in Asia up to the Himalayan region or its culture circles originally from Sindhu Valley. The people migrated were the culture bearers. They are still following the rituals generation after generation. Therefore, we can observe some variations among people residing in different places. Though they have retained the culture so far, the influence of such culture has been weaker these days. A priest from Sunachari informed that introduction of modern education, influence of western world views, growing communist philosophy, government policy on inter-caste marriage and increased cultural exchanges from other caste/ethnic groups were a few major reasons for such a cultural decline. None-the-less, their culture has a distinct focus on education, even if it may not be compatible with modern education. These rituals/festivals are close to a concept of cultural capital put forward by Bourdieu (1977, 1986, and 1996). Such capitals can be converted to economic and social capitals. They can be acquired and transmitted to a varying extent, depending on the period, the society, and the social class, in the absence of deliberate inculcation, and therefore quite consciously or unconsciously. It is cherished by the whole family or cultural group. Being familiar with the culture, scholars like Shah (1975), Caplan (2000), Stash and Hanuum (2009) and Bista (1991) might have argued that because of possession of such

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\*Hindus worship three powers personified by the *Saraswoti* (knowledge or education), *Laxmi* (wealth) and *Kali* (power) which is similar to the concept developed by Max Weber.

cultural capital, the Brahman/Chhetri are forward in education. The concept of cultural capital was initially developed to explain the unequal scholastic achievement of children from different social classes. It was developed to challenge a common sense view that sees academic success or failure as an effect of natural aptitudes.

The culture capital is associated with certain practices and values like *sandhya* – crepuscular ceremony, bathing, offering fire ceremony and Vedic recitation daily. This family life minimized the importance of wealth, without inculcating asceticism. The important thing among the groups was not to grow rich but to lead a decent and harmonious life (Ingalls, 1958). The root of such values and practices is the Vedas (originated before 5,000 years ago\*) though the cultural traits are subject to change. Traditionally, initiation or *upanayana* is primarily related to a boy (*vatuka*). It is a ritual or symbolic purification of the boy. After *upanayana*, he grows up observing how rituals are performed (private, public and state rituals). He starts learning how to read and recite text with proper intonations and studying astrology. The forms of rituals are flexible. They can be modified or ornamented, made long or short, to suit the occasion and the need of the commissioners (which is equivalent to the Sanskrit sacrificer, *yajamana* or inviter). The true aim of the rituals is *dharma* (proper moral order) and *mokshya* (salvation). Four reasons for the rituals are a desire of security and refuge, wishing success in life, a desire of wealth and faith. These rituals are process of cleaning or sweeping away the old and initiation of the new (Kuanpoonpol, 1990). *Bratabandha* can be analogized with liminal stage<sup>i</sup> as described by the anthropologists like Victor Turner and Clifford Geertz, as a kind of transition of the neophyte to a new status, with proper insignia and new role<sup>†</sup> as a new member of the respective cultural group. Such changes are critical to the shaping of both temporal and social experiences (Turner, 1969). As stated above, the neophyte is betwixt and between, neither here nor there, no longer a child and not yet an adult. After some time, he learns new things and becomes a responsible cultural member. Then, he is expected to become vegetarian and abstemious. Ablution and following commensal rules are other salient features of his everyday activities. Such a disciplined life is believed to contribute to modern education to an extent. The researcher compared the practices prescribed in scriptures with their current ritual practices. The table below shows the present reality about *bratabandha*:

Table 1: Perception of People on Contribution of *Bratabandha* to Modern Education

\*The civilization of Hindus developed in Sindhu Valley. The “s” is pronounced as “h” in Arab language. For the first time, the Arabian called the people of “Sindhu valley and their civilization” as “Hindu”. Different sages in different time perpetuated the civilization.

†Turner focus on the concept of limen, “threshold” and the term liminality. Arnold van Gennep presents a threefold schema, preliminarily, liminality and post-liminality. They embrace all transitions, and all rituals everywhere Stephen, B. (2009).

Key Indicators	Perception and practices of parents, <i>gurus</i> and <i>vatukas</i>
Importance of <i>bratabandha</i> or <i>upanayana</i> sanskar	It grants the initiated dignity and decorum. It nourishes and purifies him and his deeds. It orients him to the perfection of humanity if implemented well. As a part of society, it helps to strengthen social ties and cultural identity.
Age of the <i>vatukas</i> while being initiated	Eight years onwards
Venue	House, Temple or Party Palace
The total cost of <i>Bratabandha</i>	NRs. 10,000 – 1 million
Changes brought in <i>vatuka</i> 's life	<i>Vatukas</i> have started feeling more responsible. They found themselves more mature. As a member of the cultural group, they have begun their role.
Contribution to the education of <i>vatukas</i>	It helped them feel a part of society and culture they belong to. If the ritual is practiced well, it contributes to success in modern education as well.
Effectiveness of <i>bratabandha</i> sanskar	For <i>Gurukul</i> education, it was effective. It has been ritual for ritual sake at the moment. Due to the influence of ethnic and western culture (individualism, secularism and consumerism), it has been weaker. It has not been updated. The majority of them had not understood even the <i>rai-son d'etre</i> of the ritual. <i>Vatukas</i> were not convinced that it was really for their transformation. In terms of cost also, it has not been cheap and effective for the majority of Brahman/Chhertis. The educational significance of such indigenous ritual needs to be maximized.

Source: Synthesis of in-depth interviews, August – November 2016.

It is noteworthy that the people have been perplexed due to the changes in the broader cultural domain propagated by capitalism. They remember the cultural practices cherished by their forefathers on the one hand. On the other, the new culture that evolved around the globe also attracts them. Nobody is found there to guide them to

update or revive their original culture in the modern context. According to the concept of Robert Park (1928), they are neither in the traditional culture nor in contemporary culture but at margin. The sons were initiated, but it did not contribute to success in modern education (See Case 1 below).

### Case 1: Despite Bratabandha, the Boy Failed

During fieldwork, a sacred thread wearing ceremony of a boy was being marked. The parents were forward and wealthy. The father was also a promoter of a local public school. He played a crucial role in the development of the school. He sent his daughter to the public school. Though she was not culturally purified and prioritized, she was regular at school. Due to her hard work and perseverance, she passed a bachelor's degree in education. Now, she is teaching in a neighboring school. Contrary to her success, her brother was sent to a private school and admitted to a hostel outside the village in the hope that he would attain better educational achievement. He did not have much interest in the study. Therefore, he was brought back to their village and sent to the public school again. It was hoped that the sacred thread wearing ceremony (*bratabandha* or *upanayana*) would improve his education. It was just a ritual.

According to the western concept of schooling, the Brahman/Chhetri, including others, are sending their wards to the schools after they are three years of age. Rituals are not understood well by the parents and the children. They have not followed the traditional rituals in the real sense of the term. In such a context, the traditional cultural capital nominally contributed to their success in modern education (See case 2 below).

### Case 2: How Can We Explain Success Without the Ritual?

Ankit was an 18 years old boy from the Thakuri community. He passed A-Level last year. After his success in the A-level, an initiation (*bratabandha*) ceremony was organized in a party palace. He said, "I have not understood the rationale of the *bratabandha*. I just heard that I could observe the funeral of my parents after I am initiated." He did not rule out the role of *bratabandha* for his future education, but it is doubtless that his success so far was not due to the ritual. His parents had spent a lot (1 million) on the cultural ceremony. Consequently, they hoped their son would be more responsible and sensitive culturally after the ritual.

Both cases show that modern education is a kind of secular system. It has its manifest and hidden aim. It has its ways of socializing pupils and has no link with *upanayana* or *bratabandha*. One of the research participants even opined to delink

*upanayana* and modern education. The implication is that their traditional cultural capital has not contributed to success in modern education. However, compared to other caste/ethnic groups, the Brahman/Chhetri students are found forward in enrollment and achievement. Existing data indicated their high enrollment in comparison to their population. Such an overrepresentation is voluntary. The reason behind their “success” can have some association with the position they hold in social structure. Similarly, it is also true that they are rich in cultural capital, which has some link with education as stated above. Undoubtedly, they accord a high priority to education.

As per in-depth interviews with the people of different ages and cultural backgrounds, the researcher found that parents and forefathers of the Brahman/Chhetri were literate if not well educated. They were familiar with the unfolding educational processes around the globe which are largely influenced by the market values under broader capitalism outside their communities. Therefore, they played a significant role in establishing the school in their community for the first time (Parajuli, 2006). Due to their positivity and optimism towards education, majority of them have been ready to send their wards to school. Their children have been familiar about three “r” (reading, writing and numeracy) before going to the school. In such a context, the children feel easy to adapt in school.

Secondly, the majority of the Brahman/Chhetris were skillful cultivators. Their forefathers brought paddy and plow culture for the first time in Nepal\*. The women were very skillful in storing, processing and using the grains. Therefore, they are economically stable and do not worry for survival. Such a condition also encouraged them to continue education for some time.

Thirdly, a key informant narrated that the home environment of the Brahman/Chhetri is relatively peaceful. The family members do not make fuss over trivial issues. A research participant observed, “Candidly speaking, absence of alcohol and quarrel results in peace.” Traditionally, the Brahman/Chhetri do not accord a high priority on excessive materialist life. Instead, they believe in sacrifice and lead a decent life. Such a family background also encourages children to pursue education. Fourthly, it is found that the Brahman/Chhetris possessed a sense of superiority. They took part in every activity of the community. They constituted the mainstream culture. Their children were socialized in that way. Such enculturation made their wards optimistic. Therefore, they are better adapted in school.

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\*It is found that Gorakhnath brought paddy and plow culture in the hills of Gorkha for the first time. The Brahman/Chhetri spread the culture across the country. In Gorkha, the people still donate flour of paddy to Gorakhnath temple in return in July-August even today. See Simkhada (2001: 56-58) Gorkha from Past to Present, in Gorkha Parichaya, Kathmandu: Gorkha Social Service Center.

Fifthly, the research did not bring sufficient evidence to claim that their success or failure was due to their caste/ethnicity. Every case under consideration was unique. Therefore, it is not relevant to attribute one's caste/ethnicity for success or failure. Instead, educational attainment can be viewed as individual success or failure.

### Case 3: Beyond the Stereotypes

There were numerous high caste Hindu Brahman/Chhetri boys. Their birthplace was known in the district for their familial power and prominence. The headteacher and the founders were from their lineage. School was nearby their house. The parents sent them to the school regularly. They even visited the headteacher regularly. However, they could not complete full cycle of school education. After failure, they wandered here and there for employment. It was in vain. Finally, they got menial jobs. Their plight was sad though they were initiated and possessed the same so-called superior cultural capital.

Finally, the review and observation of rituals of the Brahman/Chhetri lead the researcher to the inference that they are rich in the cultural capital which accord high priority on education. However, they are followed for ritual sake only. The in-depth analysis of role of cultural capital in shaping education of the Brahman/Chhetri does not provide the researcher adequate basis to claim that they are performing better due to their traditional cultural capital. In other words, their cultural capital has confined role at present and does not necessarily contribute to their educational success (See case 3).

### Concluding notes

As indicated in the analysis, market values propagated by capitalism in general and modern education in particular has penetrated the community where the researcher conducted research. Caste ideology or cultural capital specifically has been found less influential at present due to internal and external factors. During the 1950s, when the bureaucracy was being modernized, the Brahman/ Chhetris would have benefited because of their better literacy skills and social standing. At present, the researcher found diversity among them regarding their class, caste, and gender. Their traditional cultures have undergone different transformations due to the expansion in capitalism and globalization. In such a context, the traditional cultural capital used to accord high priority to the education has also been weaker. On the other hand, modern education has been developed so that it has nominal association with their indigenous culture. They have not updated their rituals as per the ongoing changes in their socio-cultural milieu. Their cultural rituals related to education are followed for rituals' sake only. Sometimes, the rituals seem like a mockery (*deshatana* for instance). Therefore, it is not safer for

social scientists to conclude that they are forward in modern education due to their traditional cultural capital in a stereotypical vein. It could be right in the past. At present, the meaning, intent and impact of the rituals are faded away. If not revived, the rituals like *bratabandha* may not play significant role to encourage the new generation to realize success in any walks of life in the future.

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## **An Impact of New Technologies on Cropping Pattern in the Eastern Hills of Nepal**

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### **Abstract**

*This abstract starts with the purpose of the study of the impact of using new technologies on cropping pattern particularly in the case of the Eastern hills. It also examines the role of governmental organizations and non-governmental organizations to improve agricultural systems of this area. Relevant data have been obtained from both primary and secondary sources. It draws on the data collected from interview, focus group discussion, key informant survey, and field observation. For this, 30 percent sample households were selected from three altitude belts such as upper, middle and lower, ranging from 300 to 2,250 masl along the Koshi-highway. It has a wide range of climates, ranging from sub-tropical to alpine with monsoon precipitation in the summer for three and half months, and therefore it has diversity in flora and fauna and people. Similarly, secondary data have been collected from various books, journals and official records.*

*This paper has showed that the crucial impact of acceptance of innovative methods in agriculture in the study area is a joint effort of local people, government, and non-government agencies too. The government with the development agencies and non-government organizations has contributed to impart knowledge of the agriculture innovative methods to the local farmers. At the same time, the farmers were enthusiastic to learn and adopt those methods. Consequently, one can easily see the remarkable changes in cropping pattern due to the impact of such innovations. The cereal crops based on agricultural system is gradually moving towards high value off-season crops farming.*

**Keywords:** *adoption, commercial production of vegetables high yielding variety of seeds, plant protection measures, seed treatment/ seed germination test.*

### **Introduction**

In common situation, pre-established theories and models form the base for the geographical study and analysis too. Such theories and models are being taught in

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school and universities for this particular reason. The scholars developed the theories and models through the experience and study of various geographical regions which are being used in geography for a long time. Central Place Theory (Christaller 1933) provides a comprehensive frame work for the explanation of spatial pattern of urban places (Pradhan 2004). Similarly, Agricultural Land Use Model (Von Thunen 1826) forms the base to analyze how and why agricultural land use varieties with the distance from market (Husain 1996). Likewise, The Pipeline Model of Innovation Diffusion (Biggs, 2003) provides the literature to describe 'Transfer of Technology' and The Diffusion Model (Hagerstrand 1953) leads most of the geographical interest towards diffusion studies (Wagle 2019). These theories have been widely appreciated to analyze geographic phenomenon for a long time. In this context, the use of new technologies in agricultural sector has completely changed into the cropping pattern of the Eastern hills of Nepal (Wagle 2019). This prototype may be helpful to understand the change of cropping pattern in other geographical regions through the access of these technologies. Hence, this study may provide a base to understand the strength of these technologies in cropping pattern especially for other hilly regions of the world.

Agricultural growth and development depend on various innovative techniques, and ideas adopted by the farmers and influenced by several socio-economic and spatial factors. They are different from one place to another based on personal, agronomic, socio-economic, bio-physical and intuitional factors (Sharma 1979, Mathema (1986). Besides Choe & Pradhan (2010) focus on marketing networks for production activities, but Chand (2016) has found the decisive of geographical factors to understand the acceptance rate of new technologies in agricultural sector. Agarwal et al. (1978) had identified the use of chemical fertilizer is highly interrelated with the distance from the road and availability of extension service centers in the Gandaki Zone of Nepal. In addition, farmers' perceptions, infrastructure and the economic incentives of the agriculture sector are also equally important to decide alternative production techniques (Berner, Harrison, Baxter, 1984).

In the same perspective, Virgo and Subba (1994), Koirala (2006), and Khatiwada (2014) revealed the case of hills, and they found that there are some changes occurred in the agriculture sector along the Koshi Highway. They argued that commercial crops have been replaced by cereal-based subsistence farming. They point out that the establishment of the then Pakharibas Agriculture Research Centre (PAC), increasing access to roads, farmers' self-efforts and market integration, and GO and NGO supports are drivers to change. But these studies did not analyze the role of new technologies minutely i.e. chemical fertilizer, plant protection measures, improved seeds and seed treatment etc. Realizing the existing situation, the question can be raised regarding driving factors and pace of changes in the acceptance of innovations of the eastern hills.

Therefore, this study has attempted to observe the role of various organizations for the diffusion of innovations and appraisal the impact of innovations on cropping patterns of the study area too.

## 2. Method and Materials

### Sources of Data

The paper is based on primary and secondary data. The major sources of primary data collection are field observation, focus group discussion, questionnaire and key informant survey. Similarly, various books, journals, and official records are the core sources of secondary data collection. Besides, collected data are arranged, and presented in the table as required. Simple statistical tools percentage and percentile change are used. On the basis of analyzing the gathered data, a descriptive paper is prepared. Both quantitative and qualitative techniques are used in order to achieve the goal.

### Selection of Sample Study Centers and Households

Based on the **central place theory of Walter** Christellar, the study area has delineated along with buffering of 1.50 km of the Koshi Highway of Dhankuta district located in the Southern slope of the Eastern hills where rapid changes in the agricultural sector have been occurred after the decade of 1980. Besides, the study area is divided into 3 Agro-Climatic Belts, namely, lower, middle and upper altitude belts, respectively based on Agro-Climatic classification of the District Agriculture Development Office Dhankuta. From this, the study has been based on a stratified random sampling method. For this purpose, almost 30 percent (166 households) farm households have been selected from each ecological belt having more than 0.50 hectares (0.83 ropani) of each, both *Khet* and *Bari* land (Table 1).

Table: 1 Method of Sampling Households

<i>Altitude Belts</i>	<b>Total Households</b>	<b>Distance from Koshi Highway ( In meters)</b>			<b>Sample Households</b>	<b>Mean Farm Size (In hector)</b>
		<b>0-500</b>	<b>501-1000</b>	<b>1001-1500</b>		
<b>Lower</b>	101	10	10	10	30	0.78
<b>Middle</b>	265	28	28	24	80	1.10
<b>Upper</b>	185	19	19	18	56	1.01
<b>Total</b>	<b>551</b>	<b>57</b>	<b>57</b>	<b>52</b>	<b>166</b>	<b>1.02</b>

Source: Field Survey, 2016.

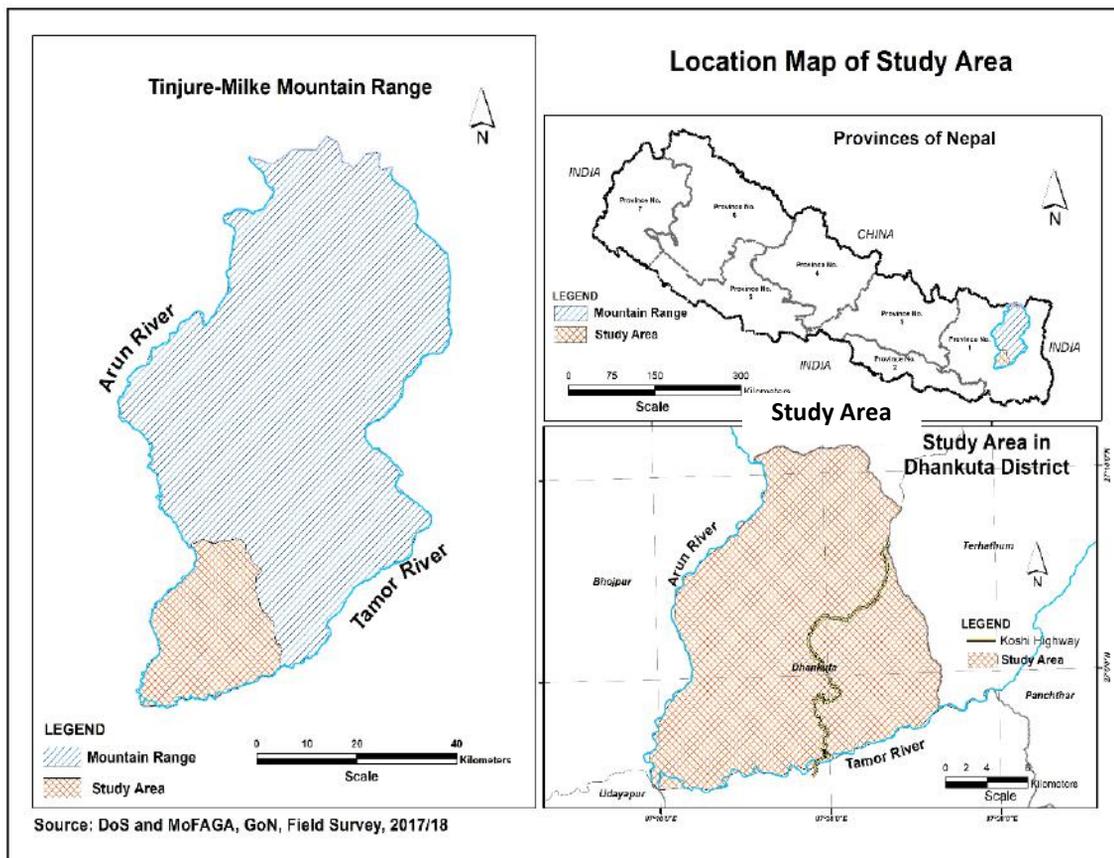
Moreover, the researcher has taken three study centers as sample from each altitude belts. They are Chitre, Sindhuwa and Jorpati from the upper altitude belt; Kuwapani, Kagate, and Dhankuta Bazar from middle altitude belt. Similarly, Guthitar, Rudrabari, and Mulghat from lower altitude belt, respectively. Chemical fertilizer, improved seeds, plant protection measures and seed germination test are included as modern innovations in the study. Apart from this, the farmers who have adopted all innovations are considered as an ‘Adopter’ whereas other groups fall in the category of ‘Non-adopters’ in the study.

### **Study Area**

The southern slope of eastern hills is different from the other parts of Nepal in various ways, such as geographical, ecological, historical, socio-cultural, and economic perspectives. The farming population of this area is also living in a subsistence agricultural system. It is a region of outstanding natural and social diversity, resulting from the tremendous geographical and climatic extremes. In this area, altitudes (300-2250 masl) and climates are range from sub-tropical to alpine and long periods of winter dryness altering with torrential downpours during the monsoon which is a challenging for human survival. It is mainly due to insufficient resource base like rocky and sloppy cultivated land, extreme climate, poor communications and infrastructures etc (HMG/ MoE 1974). The greatmajority of the people who live in this region are subsistent farmers. Over the centuries, these people have developed strategies for survival that can be maintained independently of contact with the adjacent areas. Indeed, such condition found in the Hindu-Kush Himalayan Region (Ya & Tulachan, 2003). The majority of farmers living in this area seem to have gradually changed their socio-economic conditions after the adopting new technologies in their agricultural works.

Tinjure- Milke Mountain

Figure: 1 Location Map of the Study Area



Mr. Uddab Wagle, the former administrative clerk of KHARDEP has reported that Koshi Hill Area Rural Development Project (KHARDEP) is one of the IRDP approach launched project in the eastern hills of Nepal. This project has made Koshi Highway. It has transferred technology through improved seed production, farmer training, exposure visits, and field demonstration. Besides the contribution of the District Agriculture Development Office (DADO, Dhankuta), the then National Orange Research Center (NORC, Dhankuta), and other Non-Government Organizations also appears significant. With all these efforts, the Koshi Highway seems to have brought significant changes in the agricultural development of this area since the mid -1980s. It provides access to the supply of chemical fertilizer, improved seeds, and plant protection measures at a significant rate in the study area. Indeed, it was comparatively low in the past (Pathak, 2010). The use of chemical fertilizer, improved seeds, and pesticides is increasing particularly in high-value cash crops and off-season vegetables. But the amount of use of agricultural inputs is decreasing with the increasing distance from the main road

(Khatiwada, 2014). This situation is relevant not only with farming system of the eastern hills, but also similar with other hilly regions of Nepal (Wagle, 2019). Thus, it is relevant to identify the role of various organizations for the diffusion of new technologies and changing behaviors of the farmers towards the selection of crops in the present situation.

### 3. Discussion and Results

*The historical development of the adoption and diffusion of agricultural innovations in the eastern hilly area can be divided in three major phases: Before Panchayat Regime Period (Before 1960), Panchayat Regime Period (1960-1990), and After Restoration of Democracy Period (After 1990 to till now). After the unification of Nepal, newcomers from other parts of the country and abroad brought new seeds, farm techniques and tools based on their experiences Wagle 2019 p. 81).*

According to local elite intellectuals and farmers, the foundation of modern agriculture had created from 1960 to 1990 in the eastern hills of Nepal. Some important innovation diffusion friendly policies and programs implemented by the then government of Nepal seem to be the milestone to develop this sector. The extension of Agricultural Service Centers, construction of the Koshi Highway, subsidy in agricultural inputs, and implementation of integrated Rural Development Programs (IRDP) were considerable achievements at that period in the study area. Besides the contribution of the then Pakharibas Agriculture Centre (PAC, 1978) and Koshi Hill Area Development Program (KHARDEP, 1977) as non-governmental organizations also seems remarkable to promote the agricultural sector of this area at that duration. After that, joint efforts of both governmental agencies and non-governmental agencies have been playing a vital role in developing the agriculture sector of the study area after the restoration of democracy in 1990 (Table 2).

**Table 2: Adoption and Diffusion of Agricultural Innovations in the Study Area (In Households)**

Years	Ecological Belts				Total
		Upper	Middle	Lower	
<b>Before 1980</b>	Number	0	7	0	<b>7</b>
	Percent	0	4.21	0	<b>4.21</b>
<b>1981-1990</b>	Number	4	24	1	<b>29</b>
	Percent	2.41	14.46	0.60	<b>17.47</b>
<b>1911- 2000</b>	Number	35	34	15	<b>84</b>
	Percent	21.08	20.48	9.04	<b>50.60</b>
<b>2001- 2010</b>	Number	14	12	12	<b>38</b>
	Percent	8.43	7.23	7.23	<b>22.90</b>

2010+	Number	3	3	2	<b>8</b>
	Percent	1.81	1.81	1.20	<b>4.80</b>
<b>Total</b>	Number	<b>56</b>	<b>80</b>	<b>30</b>	<b>166</b>
	Percent	<b>33.73</b>	<b>48.20</b>	<b>18.07</b>	<b>100</b>

Source: Field Survey, 2016.

The table reveals that only 4.21 percent (7 Households) farmers have used agricultural innovations before 1980. The farmers of the Kagate and Dhankuta centers in the middle altitude belt had used such technologies at first which is known as the first beginning point towards the use of new technology in the eastern hills (Wagle 2019). The table indicates that the adoption reaches the top level during the years 1991 to 2000. Almost, 51 percent (84 Households) farmers have used such innovations at that period. The diffusion seems rapid in the beginning, and reaches the climax by 2000. After that, diffusion seems a rapidly decreased. The existing trend shows that the acceptance of innovations appears satisfactory, but the sustainability of such new technologies is questionable (Wagle 2019). Besides, the table also shows that all farmers of the study area had the users of any type innovations for their agricultural works in the past, but some farmers had stopped to use such measures after some time.

### Role of Organization to Promote New Technology

Several GOs and NGOs have been working for a long time to develop the farming system of the eastern hills focusing on cash crops. The local intellectuals and key informants have remarked that District Agricultural Development (DADO, Dhankuta), Agricultural Research Station Pakharibas (ARSP) and National Citrus Research Programs (NCRP, Dhankuta) have a leading role in developing the agricultural sector of this area (Table 3).

*Table: 3 Role and Involvement of the Agencies to promote Agriculture*

Ecological Belts	Number	ARSP	DADO	ARSP + DADO	Ag. Centre	ARSP + Ag. Centre	Others	NCRCP	NCRCP + ARSP	None	Total
<b>Upper</b>	Number	12	16	11	7	6	4	0	0	0	56
	Percent	7.22	9.64	6.63	4.21	3.61	2.41	0	0	0	
<b>Middle</b>	Number	0	14	41	0	1	0	2	22	0	80
	Percent	0	8.43	24.70	0	0.60	0	1.20	13.25	0	
<b>Lower</b>	Number	1	14	14	0	0	0	0	0	1	30
	Percent	0.60	8.43	8.43	0	0	0	0	0	0.60	
<b>Total</b>	Number	13	44	66	7	7	4	2	22	1	166
	Percent	7.82	26.50	39.76	4.21	4.21	2.41	1.20	13.25	0.60	100

Source: Field Survey, 2016.

District Agricultural Development Office (DADO, Dhankuta) has been facilitating the farmers from the beginning to adopt such technologies as well as supporting technically and economically among the organizations. The local farmers have reported that they are getting support from DADO Dhankuta, especially on receiving improved seeds, irrigation, and advice during the time of epidemics of plant diseases. Besides, they have been keeping contact for help and advice during the time of need. The farmers also remarked that it has been organizing different programs related to the agricultural development like seminars, meetings, trainings and observation tours for them. In addition, this agency is actively involving in implementing the current policies of government related to the agricultural sector in the study area.

Agriculture Research Station Pakharibas (ARSP) has been working devotedly in this area since 1972. It was established by the then British Government to provide technical knowledge for Ex-Gurkhas soldiers to make them self-dependent. In the beginning, the organization supported the Ex-Gurkhas in their agricultural works, especially for cereal and vegetable crops farming and animal husbandry also. After that, gradually, other farmers of the study area have also been benefitting through the programs of this organization. Recently, this research station is using 88.64 hectares of land for the research purpose of developing new technologies in the agricultural sector. Now, it has known as popular service provider station among the farmers. The local intellectuals have said that there is a leading role of this research station to bring the agricultural sector of this area up to the present condition. Now the main focus of this station is concentrating on research works. Along with this, it has also been conducting seminars and training related to this sector.

National Citrus Research Programs (NCRP, Dhankuta) is next leading organization that has been involving for agricultural development. It was established in 1961 in the mid- hilly region of Nepal to develop and extend horticulture in this region. In the beginning, it focused on the development and extension of both vegetable and fruit farming, but now it focuses only on the development and extension of horticulture. The different species of fruits that are developed and produced by NCRP are spreading all over the world (Wagle 2019). Besides, the role of Uttarpuni Technical School seems remarkable to diffuse technical knowledge among the poor farmers by producing JT and JTAs (Table 7.2). Apart from the major governmental organizations, some other non-governmental organizations like Society of Local Volunteers (SOLVE) and Poverty Alleviation and Rural Development Project (PARDEP) have also contributed to promote the market of agricultural products.

Table 4 indicates that around 8 percent of the total farmers (13 households) have benefitted only through the technological support of Agriculture Research Station Pakharibas (ARSP) to continue their occupation. Likewise, almost 27 percent (44

households) of farmers are involving in their agricultural works with the technical and economic support of District Agricultural Development (DADO, Dhankuta) only. In this way, around 4 percent (7 households) of farmers have got support from agriculture extension centers only and almost 1 percent (2 households) farmers have got available support of National Citrus Research Programs (NCRCP, Dhankuta).

Besides, farmers of the study area are getting regular support from more than one organization. Table 3 shows that around 40 percent (66 households) farmers of the study area have been benefiting from regular technical and economic support of both Agriculture Research Station Pakharibas (ARSP) and District Agricultural Development Office (DADO, Dhankuta). Similarly, nearly 13 percent (22 households) farmers are receiving continuous support from National Citrus Research Programs (NCRCP, Dhankuta) and Agriculture Research Station Pakharibas (ARSP). Likewise, Agriculture Research Station Pakharibas (ARSP) and Agriculture extension centers provide their joint services to almost 4 percent (7 households) farmers. In this way, more than 2 percent (4 households) farmers are getting support from non-governmental organizations except mentioned organizations. In this way, there is an indispensable role of both governmental and non-governmental organizations to develop and promote the agricultural works of the study area.

### **Impact on Cropping Pattern**

The land use and cropping pattern are known as dynamic concepts and processes. Cropping pattern varies from place to place depending on the terrain, topography, slope, temperature, amount and reliability of rainfall, soils, and availability of water for irrigation (Chouhan 1987). In this context, Oli (2002) has remarked:

The general view of farmers seems to be that if high yielding varieties are available, why to keep and continue producing low yielding local varieties. Using hybrid crops is important for increasing yield per unit area. Farmers are happy as they need not keep the seed but still get a bumper crop in the immediate future.

This was evidenced by the fact that now a greater number of farmers are using improved crops and have stopped saving their own crops for seed, (P. 20).

Similarly, government agencies can also encourage the farmers to adopt proper crops exclusively rather than traditional crops by providing subsidies. As a result, there is a contraction in an area under the traditional crops and a corresponding change in the cropping pattern. The farmers of the study area have been using newly, improved seeds of vegetables and food grains since 1980 through the inspiration of governmental and non-governmental agencies. So, the cropping pattern of the study area has drastically changed due to the impact of using such new technologies in the study area.

▪ **Vegetable Farming**

Vegetable farming is known as the crops farming of all year round. In the current day, mainly the farmers of the upper altitude and the lower altitude seem as more professional in the vegetable farming rather than the middle altitude due to the other opportunities like a government job, foreign employment, and other secondary occupations. It is most popular in the upper and lower altitudes although it is spreading everywhere in this area. Generally, cauliflower, cabbage, radish pea, and tomato are known as the major vegetable crops in this area. In the beginning, vegetable farming introduced only as kitchen garden farming. Most of agricultural land was occupied by cereal crops before 1980 and a human settlement was in dispersed forms. The farmers gradually motivated towards the vegetable crops from the beginning of 1981 through the technical support of the then Pakharibas Agriculture Centre and District Agricultural Development Office (DADO, Dhankuta). Besides, the Koshi highway also helped to extend the vegetable crops in the eastern hills of Nepal (Wagle 2019). Also, local farmers have remarked that Guthitar and Rudrabari of the lower altitude belt are famous as a *Tomato Belts*. However, the cultivation of cauliflower and cabbage has also cultivated professionally in these centers, but the main focus of the farmers seems in tomato production. According to the local farmers, Tomato cultivation has started from the period of 1991 to 2000 through the effort of pioneer farmers Rabin Yogi from the technical support of Agriculture Research Station Pakharibas (ARSP) in this belt. Table 4 shows the detailed information about cropping pattern of the study area

**Table: 4 Change in Area of Vegetable Farming before 1980 -2015, (Area in Hectares)**

Altitude Belts	Before 1980		2015		Total ('Bari')	Percentile Change (In hectares)	
	A	NA	A	NA		A	NA
Upper Altitude Belt	0	46.43	42.84	3.59	46.43	+347	-275
Middle Altitude Belt	2.86	60.10	33.08	29.70	62.78	+1057	-49
Lower Altitude Belt	0	22.18	16.97	5.21	22.18	+318	-77
<b>Total</b>	<b>2.86</b>	<b>128.89</b>	<b>92.89</b>	<b>38.50</b>	<b>131.39</b>	<b>+1297</b>	<b>-401</b>

Source: Field survey, 2016.

**Note:** - A - Adopted Area                      NA- non-adopted Area.

The table indicates the change in the cropping pattern from the beginning to 2015 in the study area. The available statistics point out the area under vegetable farming has increased significantly during this period. The percent coverage of the vegetable crops areas has increased from 2.86 hectares (Before 1980) to 92.89 hectares (2015). The percentile change is seen the highest (+1297) in the vegetable cropping area during the

35 years. However, the changing rate varies according to the altitude, and the study centers both.

The situation reflects that the central focus of the farmers has concentrated on the vegetables rather than the traditional cereal crops. The interest seems more in the upper and lower altitude belts in comparison with the middle altitude belt.

#### ▪ **Maize Farming**

Now, maize is second principle staple crop in the study area. However, it was as the first major staple crop in the past. The area of maize cultivation has gradually been declining with the increasing interest towards the vegetable farming (Wagle 2019).

*Table: 5 Change in Area of Maize Farming before 1980 -2015 (Area in Hectare)*

Altitude Belts	Before 1980		2015		Total (Bari )	Percentile Change (In hectares)	
	A	NA	A	NA		A	NA
Upper Altitude Belt	46.30	0	3.39	43.04	46.43	-7	+7
Middle Altitude Belt	62.78	0	33.01	29.77	62.78	-53	+130
Lower Altitude Belt	22.18	0	10.33	12.05	22.18	-46	+112
<b>Total</b>	<b>131.39</b>	<b>0</b>	<b>46.73</b>	<b>84.66</b>	<b>131.39</b>	<b>-36</b>	<b>8566</b>

Source: Field survey, 2016.

#### **Note: - A- Adopters of Innovations**

#### **NA- non-adopters of Innovations.**

Now, maize farming is practiced in the limited area by the limited farmers as a subsistence crop for food and fodder. Apart from this, it is grown as a kitchen garden farming in the upper and lower altitudes and as subsistence farming in the middle altitude. The table 5 indicates that the maize farming area was 131.39 hectares before 1980. Now it is compacted only in 46.73 hectares during the period of 1980 to 2015. The significant change is occurred in the maize cultivating area. In addition, the changing rate significantly differs from one altitude belts to another. Agricultural technicians of local agricultural extension center have reported that mainly, this area contains only summer maize in 'Bari' during the period of the rainy season

#### ▪ **Paddy Farming**

The history of paddy farming seems so long in the study area because of its cultural value. It is compulsory for every cultural ceremony, so the farmers put it in top priority wherever it is possible (Wagle 2019). However, the farmers are still following the traditional method for paddy cultivation. Moreover, farmers have been using only

chemical fertilizer for this crop from the beginning as an innovation. Now, it has existed only in the small patches of the middle and lower altitudes (Table 6).

**Table: 6 Change in Area of Paddy Farming before 1980 -2015 (Area in Hectares)**

Altitude Belts	1980		2015		Total (Khet)	Percentile Change (In hectares)	
	A	NA	A	NA		A	NA
Upper Altitude Belt	0	0	0	0	0	0	0
Middle Altitude Belt	7.99	0	7.99	0	7.99	0	0
Lower Altitude Belt	0.70	0	0.70	0	0.70	0	0
<b>Total</b>	<b>8.69</b>	<b>0</b>	<b>8.69</b>	<b>0</b>	<b>8.69</b>	<b>0</b>	<b>0</b>

Source: Field survey, 2016.

**Note: - A- Adopters of Innovations      NA- non-adopters of Innovations.**

Table 6 indicates that the area of paddy cultivation has remained same from the beginning to now. The local people remark that due to the lack of irrigation, irregular rainfall, and sloppy area paddy cultivation is limited only in a certain area. Besides, it needs more inputs and gives lower output in comparison with other crops. So farmers have been cultivating only in an 8.69 hectares' area from the beginning.

The entire analysis indicates that the study area's cropping pattern is gradually changed and moving towards vegetable and high valued improved crops. A remarkable change has occurred in both land use and cropping pattern from the last 35 years.

Based on the comprehensive analysis of the study, the significant findings related to the core objectives are:

- The trend of new technologies diffusion is found slow in the beginning, rapid in the middle, and declining. Only 4.21 percent (7 households) farmers were adopters of innovations at the beginning period of before 1980. 50 percent (65 households) were added from 1991 to 2000 and reached 92 households as total adopters. Now 78.30 percent (130 households) farmers have used new technologies for their agricultural works.
- The farmers have forwarded their steps towards high value commercial farming. Similarly, the role of governmental and non-governmental organizations seems most useful for new technologies diffusion process. The contribution of Agriculture Research Station Pakharibas (ARSP) and the District Agriculture Development Office (DADO, Dhankuta) seems a pioneer among the involving organizations.

- The cropping pattern of the study area is gradually changed and moving towards off-season vegetable farming. The remarkable change occurs in both land use and cropping pattern of the study area from 1980 to 2016. Similarly, the acceptance of new technologies depends on nature of crops rather than altitude and distance factor.

### Conclusion

The use and diffuse of new technologies is complex and dynamic process. The focus of study seems to observe the role of various institutions for increasing popularity of new agricultural technologies in the eastern hills of Nepal. Also, it has helped to understand the diffusion trend of such technologies and their impact on the cropping pattern in the case of the southern slope of eastern hills. The south slope of eastern hilly socio-economic environment is changing rapidly through the dynamics of adaptive techniques. Change also occurred in attitudes and activities of people after overcoming traditional thinking due to the increasing awareness. Therefore, one of the striking conclusions of the study regarding with the innovations diffusion is the fact that Koshi highway networks link to major urban centers of Eastern Tarai as well as Indian markets have accelerated to the growth of offseason vegetables. In this change, the farmers have pressured to adopt new technologies in the study area.

Besides, the role of research centers and non-governmental organizations seem significant in diffusing new technologies, respectively. However, the contribution of the above agencies in this sector is in a limited area, but it is true that their contribution is indeed remarkable and respected. The use of modern agricultural innovations can give good results at the beginnings, but its effect cannot be useful and well soon. The leading causes of the not successful outcome of modern agricultural innovations are the unscientific use of technology due to the lack of knowledge and poverty. Due to these reasons, decreasing soil fertility and the diseases in the crops are increasing day by day. As a result, the durability and acceptance of the new technology can be questionable. If we use the technology properly, it is contextual and familiar. An effective monitoring system should be developed from both government and public sectors to adopt innovations environmental and crop production - friendly.

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## Impact of Climate Change on the Farm-based Adaptive Strategies in Bhaktapur District

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### Abstract

*This paper explores the impact of climate change on the farm-based adaptive strategies of the communities in Suryabinayak Municipality, Bhaktapur district. The mixed-method (QUAN-QUL) research design was applied to data collection, although, quantitative method is predominant. There were 107 households sampled purposively from Ward No. 5 and 9. Primary data were collected from field observation, personal interviews, focus group discussion (FGD), and Key informant survey (KIS) methods. Then these data have been analyzed through triangulation. Secondary data were collected from archives and e-resources. Individual experiences, perceptions and views have been analyzed from the Likert (1-5) scale and the Cronbach alpha was applied to the significant test. The findings showed that more than 65 percent of households said they received information on climate change from Radio, TV, and Newspapers. One of the Key persons stated that for almost two decades, cereal crop production is declining since the last two decades. In this regard, more than 72 percent of households reported that the temperature rise is the main reason for declining in yielding of cereal crops. It has followed by the frequent floods in the second (19.6%) and droughts in the least (8.4%). They seem to have adapted diversified livelihood strategies to mitigate the adverse conditions of climate change, such as vegetable farming, floriculture, mushroom farming, poultry, animal husbandry, and fishing according to their socioeconomic systems. However, their responses are varying across time and space based on the adaptive capacity of the local community. In this situation, the cooperation of local governments, non-governmental organizations, financial institutions, and other external supports need to increase adaptive capacity. But there does not seem to be any cooperation between the stakeholders to mitigate the effects of climate change. As a result, the majority of the community still has to rely on traditional farming methods. Thus, the farm-based adaptive strategy seems to be at risk day-by-day.*

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**Keywords:** Local knowledge, adaptive strategies, climate change, natural resources, and harvesting times.

### Introduction

Climate change is one of the most significant environmental challenges facing humankind today. Therefore, both social and natural sciences have analyzed climate change as a cross-cutting issue. Like other subjects, geographers seem to have been analyzing the issue of climate change as an integrated subject since the earliest times. They seem to have been analyzing the theme on the perspective of human-environment interrelationships. However, the process of human adaptation is varying across times and spaces due to climate change. For this reason, geographers have been involved in scientific studies on the effects of climate change on human life since the early 19th century. Critchfield (1966) integrates the issues of climate change and their interrelationships with the global distribution and physical properties of climatic elements between the earth and atmosphere over a long period. Geographers define weather, climate and climate change in this way: the weather is the condition of the atmosphere at a particular place over a short period, and climate includes the weather pattern, using statistical data over a long enough period (at least 32 years) to yield meaningful averages. Climate change includes an increase in temperature, erratic and extreme rainfall patterns, and the increased frequency of floods, landslides, and droughts that annually result in the massive loss of lives and properties (Critchfield, 1966; Wilson, 1967; UNDP, 2009; FAO, 2014; Carbone, 2016; Rohli, 2018). At present, various meetings and conferences on geography seem to be making climate change an integral part of geographic studies since the Bali Action Plan for climate change adaptation (2009), the Meeting in Tampa (2014), and the Copenhagen Agreement. The AAG is engaged with young people and academics, the general public, and policymakers to improve understanding of climate change and share climate change in geographical research (AAG, 2014). Indeed, geographers have studied climate and its various interlinkages factors for a long time. They have understood the complex nature and spatial dimensions of climate change in an integrative and interdisciplinary research approach. Climate change also spans spatial, temporal, and organizational scales and has links with many other strong and persistent geographic themes, including nature-society relationships, environmental dynamics, and vulnerability (Aspinall, 2010, p. 715).

**Rohli** (2018) has examined the tremendous effects of climatic change that forcing from both biophysical conditions such as land-use and land-cover change, deforestation, and desertification) and *anthropogenic* (increasing urbanization, greenhouse effect, air pollution) conditions on human activities. Carbone (2016) argues

that the spatial and temporal nature of drought and climate change is used in decision-making processes. In this context, the Central Bureau of Statics of Nepal defines climate change as a change in the state of the climate that can be identified by the mean or the variable properties and that persists or extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcing, or persistence anthropogenic change in the composition of the atmosphere or land use (CBS, 2016).

Climate change means that the range of climatic conditions that have expected to stress both biophysical and anthropogenic factors in the adaptation strategy of a community in a particular time and space. Humans have evolved a wide range of adaptation strategies in response to localised environmental changes, which have contributed strongly to both biological and cultural diversity. UNDP (2009) claims that people living in the poorest and most vulnerable areas are affected by climate change. They have mainly been influencing by poverty and inequalities based on wealth, gender, location, and markets. Thus, integrated adaptive strategies require empowering the adaptive capacities of vulnerable groups on the one hand and increasing investment in social protection, health, education, and other measures on the other.

Climate change has affected to decline in agricultural production and food insecurity in vulnerable areas. Losses in agricultural productivity can reduce income and diminish access to health and education, reinforcing cycles of poverty and vulnerability (UNDP, 2009). Since climate change is a global problem, and it requires global action to adapt to adverse conditions of climate change. Thus, adaptation is considered one of the aspects of climate change to develop a strategy along with mitigation. In this case, local knowledge of farmers can be considered a way to adapt to climate change. Their knowledge and experiences are tested and adapted to their cultural environments over the centuries (Woodward, 2008; Aspinall, 2010; Rohli, 2018).

Agriculture is the largest sector of the economy in Nepal, accounting for some 26.98 percent of the GDP and 64.5 percent of the labor force in 2018/19 (GoNMoF, 2019). Increasing agricultural production is essential for food security and household needs due to thousandsof people are entering in labor market annually in Nepalese. However, the effects of climate change such as increasing temperature, changes in rainfall patterns, and variation in intensity and frequency of extreme events of droughts and floods decreasing the production of crops-rice, maize, and vegetables in Nepal (CBS, 2016; CBS, 2019; GoNMoF, 2019). The government has taken various steps to adapt to the effect of climate change, such as the Everest Declaration of the Cabinet (2009), Prime Minister Agriculture Modernization Project (PMAMP), Agricultural Development Strategy (2016/17-2035), the Fifteenth Periodic plan (2019/20- 2023/24), and the Green development for sustainable agricultural

development and food security. Their efforts have addressed the impact of climate change fruitfully on the farm-based adaptive strategy of the communities doesn't seem to be very successful due to the lack of coordination between the governments and the stakeholders (Shrestha, 2009; ADS, 2015-2035; CBS, 2019; Shrestha, 2020).

On the other hand, the Nepali community has been adopting various strategies to mitigate the impacts of climate change since time immemorial, such as shifting cultivation into more resilient agroforestry, conversion of sloping terraced into irrigated level-terraced (*Bari* into *Khet*), change in cropping calendar, selecting of drought resisting seeds, and multiple cropping (Khatiwada, 2014; 2019). MOSTE (n.d.) demonstrates five cases related to local communities who were collectively engaged in utilizing indigenous, traditional, and local knowledge to deal climatic stresses. Nowadays, local communities used footing different adaptive strategies, such as the introduction of high-yielding varieties of seeds, chemical fertilizers, and pesticides, although it is still in its infancy stage in Nepal. At the same time, local governments, non-governmental organizations, financial institutions, and external supports have not properly mitigated the impacts of climate change. These factors determine the adaptive capacity of local communities that relate to their biophysical, socioeconomic, institutional, and technological conditions that replicate to adaptive measures in a particular area, like Suryabinayak Municipality. UNDP's definition of climate change has also justified the importance of this study in this Municipality. World is experiencing greater weather extremes, changes in rainfall patterns, heat and cold waves, and increasing droughts and floods. These phenomena have a negative impact on the environment and on people's lives and livelihoods (2009).

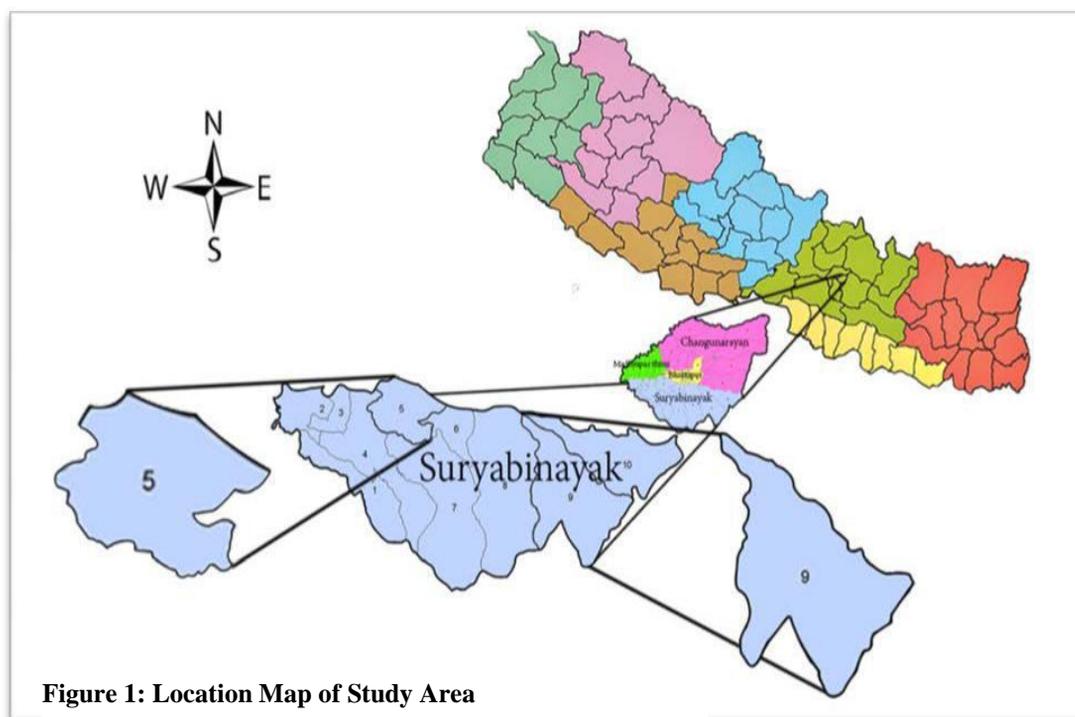
The bowl-shaped location of the study area provides a unique climatic phenomenon where both natural and human-induced factors are playing a significant role in climate change. So it seems necessary to study the impact of climate change on the farm-based adaptive strategy in geography. In this context, the focus of this paper is seeking the answer to unravel questions about why do local communities adopt a wide variety of livelihood strategies? And how they recover the adverse conditions of climate change in farm-based livelihood activities in the study area.

## Methods and Materials

### Study Area

Suryabinayak Municipality of Bhaktapur District has been taking as a study area, which became a municipal government after the incorporation of the village development committees (VDCs) of Katunje, Siphadol, Nankhel, Chitpol, Sirutar, Gundu, Dadhikot, and Balkot in 2014. The name of the Suryabinayak Municipality stems from the local Suryabinayak Temple. Katunje is the center of this Municipality.

Nowadays, the Municipality has divided into ten Wards (Fig.1), and the study area covers only 5 and 9 Wards. Geographically, it lies in the 27°39' N and 85°25' E and has covered an area of 42.45 Sq.km. with an altitude more than 1300 meters above mean sea level. Suryabinayak Municipality had a population of 78,490 with 1,848.99/km<sup>2</sup> densities in 2011. Increasing outmigration in search of cash income in urban areas as well abroad is one of the significant trends in the change in the demographic patterns. The government defines the municipality as an urban area, but the majority of households here still seem to be based on traditional and subsistence farming. Thus, agriculture is the source of livelihood of the Suryabinayak Municipality. Rapid urbanization and environmental degradation of the valley is one of the causes of climate change. The implementation of an integrated action plan is required for the valley to address the impact of climate change in the municipality. As a result, the proportion of people engaged in agriculture has gone down significantly.



### Data collection Methods and tools

The mixed-method research design was applied to data collection, although, quantitative method is predominant. The concept of mixing of different methods probably originated in 1959, when Campbell & Fiske used multiple methodologies to study the validity of psychological traits. It is useful to triangulate data sources- as a

means for seeking convergence cross of qualitative and quantitative methods (Creswell, 2014).

A multistage sampling method was applied to identify sample size and number of households. The households involved in agriculture (from Ward No. 5 and 9 of the municipality) have identified. Out of them, only those households have selected who adopt this occupation for more than three years. There were 107 households sampled purposively from Ward No. 5 and 9.

Primary data were collected from field observation, personal interviews, focus group discussion (FGD), and Key informant survey (KIS), structured, and semi-structured questionnaire surveys. Then these data have been analyzed through triangulation for quality control. For this purpose, checklist, observation protocol sheets, questionnaires were applied to data collection tools. Secondary data were collected from different sources, such as archive documents, official records, CBS reports, national and international publications, and e-resources. Creswell and Clark (2007) provides the trustworthiness of qualitative research in a smaller sample size as compared to a larger sample size. Based on their suggestion, we have taken interview from those communities who involved in farm-based livelihood activities. Other activities like key informant survey and focus group discussion were also applied to triangulate data. Both descriptive and analytical methods were applying to data analysis. Individual experiences, perceptions and views have been analyzed from the Likert (1-5) scale and the Cronbach alpha was applied to the significant test. Maps, tables, diagrams, and descriptive statistics are using to test the significance of this paper.

### Result and Discussions

Suryabinayak Municipality seems to have been inhabited by both the caste and ethnic groups since time immemorial. They are also known as indigenous people/ communities. Traditionally, these communities have adapted to diversified livelihood strategies, like agriculture, animal husbandry, cottage industry, and petty trading. Subsistence agriculture is a mainstay of livelihood (Photo 1).



Photo 1: Cropping pattern of Suryabinayak Municipality

However, traditional agricultural systems have not

been able to meet food and other households' needs. It is determined by the constrain

over access to cultivated land. As a result, they have maintained their integrated subsistence resource use strategies such as cropping calendar, seed preservation, selection of drought resisting crops, cropping, irrigation, horticulture, animal husbandry, and fertilizing with compost. They have also needed additional inputs, such as multiple cropping, crop diversification, and intensification for food security.

Nowadays, the traditional adaptive strategies have been undergoing a transformation with urbanization and improved access to market and support services. As a result, local communities have been benefiting from diversified strategies such as vegetables, floriculture, poultry, animal husbandry, and fishing. These adaptive strategies seemed to be influenced by three factors: urbanization, globalization, and climate change.

### **Local Knowledge and Perception on Climate Change**

In this paper, the knowledge generated and continued from the community of the Suryabinayak Municipality has known as local knowledge. This knowledge is based on their experience, tested and adapted to their cultural environments over centuries. *They have considered that local knowledge is their capital to adapt to adverse conditions of climate change.* Communities that lived in both the urban and rural areas have aware of their way of life.

One of the key informants stated that local knowledge has popularly been practicing in this area through their experience in diversifying agriculture activities to mitigate crop failure in an adverse condition. However, Suryabinayak Municipality is located in an urban area, but the majority of the communities are still involved in agricultural activities. Thus, agriculture is a mainstay of their livelihoods. *It seems to be using local knowledge to increase soil fertility, cultivate weeds, increase humidity, and manage wild species.*

They have been employing their knowledge to manage natural resources, such as fertility of the soils and management of wild species. Their knowledge related to the selection of cropping varieties, cropping calendar, intercropping, planting, and harvesting times to address the effects of climate change (drought, risks, and hazards). It is also equally important to manage tiny agricultural resources to reduce poverty and to secure sustainable survival strategies through the better use of local resources. Local communities select wide varieties of adaptive strategies that turn the impact into opportunities. These strategies are vegetable farming, floriculture, mushroom farming, floriculture, poultry, fishing, and dairy. These strategies show a combination of modern and traditional knowledge to adopt adverse conditions. However, with the increasing use of modern knowledge, their traditional adaptive strategy seems to be eroding day-

by-day. Many farmers seem to agree that their traditional knowledge was backward, weak, inferior, and not be able to meet the growing needs as compared to modern ones. This finding is similar to the study of primitive Moseley, Perramond, Hapke, and Laris in 2014.

It is equally important to know how local communities find out information about climate change. They reported that they would get information about climate change from the radio, Television, and News Papers. The nature of information can be divided into three sources, such as audio, audio-video, and printed media. One of the key informants reported that the source of information as follows:

I often watch radio and television and also frequently read daily newspapers. These are just some of the reliable sources of information about climate change. Nowadays, the Internet, Facebook, and other means of social media have also been used to get information. The news provides daily weather information such as temperature, rainfall, sunrise, sunset, clouds, humidity, etc. This information gives us a lot of knowledge about climate change. Not being able to plant crops on time due to drought, erratic rainfall, fluctuation of floods in the river, are also give information about climate change.

This paper has also revealed the households' responses regarding sources of information about climate change by gender (Table 1).

**Table 1**  
**Source of the information about climate change**

Sources of Climate Change	Gender				
	Male	Percent	Female	Percent	Total Percent
Newspaper	49	45.8	21	19.6	65.4
Radio, Television	8	7.5	5	4.7	12.1
Internet	15	14	9	8.4	22.4
Other	-	-	-	-	-
<b>Total</b>	<b>72</b>	<b>67.3</b>	<b>35</b>	<b>32.7</b>	<b>100</b>

Source: Field survey, 2020.

Table 1 shows the source of the information about climate change in the study area. The result indicates that newspapers as the prime source of knowledge about climate change which covers the largest percentage of the households (65.4%). It is followed by the Internet and Facebook in the second (22.4%) and Radio and Television in the least (12.1%). Gender-based responses are similar to these findings, such as male (45.8%) and females (19.6%) for newspaper in the first and Internet and Facebook in the second males (14%) and females (8.45%).

### Climate and Climate Change

The urbanization process of the Kathmandu valley started in historical times, and accelerated growth has taken place since the 1970s. Nowadays, Kathmandu valley comprises two metropolises, sub-metropolises, and municipalities including Suryabinayak Municipality. Suryabinayak Municipality has changed dramatically in the last three decades. Under the influence of urbanization process, the cultivable land is declining day-by-day. The findings of Dongol & Shrestha (2017) on the impact of urbanization on arable land in Madhyapur Municipality seem to be similar in the study area. Their estimation shows that 17 ha per year of agricultural land has been depleting from 2000 to 2014.

Most of the expanded settlements do not have sanitation facilities. Due to the lack of a proper drainage system, water has polluted the river, which causes irrigation problems. Other factors such as increasing the incidence of floods by encroaching on river banks, lack of waste management, unregulated industrial development, and manufacturing establishment, air pollution etc. have also contributed to climate change. The increasing number of vehicles and the expansion of roads are also accompanying emissions of CO<sub>2</sub>, SO<sub>2</sub>, and NO<sub>x</sub> consumption of ozone-depleting substances in the study area.

The average temperature condition of the Kathmandu valley has recorded 19.2 and 19.7 degrees C in 2003 and 2017 respectively and it was 20.3 degrees C in 2010. The above mentioned three years' average temperature (19.8 degrees C), this figure shows that the temperatures in this municipality have been changing for the last two decades. The mean annual precipitation of the valley has recorded at 1454.84 mm from 1981-2010, and it was 1439.7 mm from 1971 to 2000. The fluctuation of precipitation has determined by the onset of the monsoon. Both environmental statistics of the temperature and precipitation indicate the situation of climate change in this municipality. In addition, when the drought, frequent rains, hail, and floods reduce the production of food grains, local communities have been considering an indicator of climate change. They involved in the farm-based livelihood activities seem to have received information about climate change in various ways, such as drought, excess rainfall, intermittent rains, crop failure, declining yields, fluctuation of water level in local rivers and tube wells.

The community's response to the effects of climate change is of great importance. A Likert scale is applied to measure their perceptions and views. It was devised by Likert in 1932 and assumed that the intensity of an individual attitude is a linear progression on the strong agreement or strong disagreement. For this purpose, a 5-point scale was used to express an individual perception, such as 1 for strongly disagree, 2, 3, 4, and 5 for disagree, undecided, agree and strongly agree (Table 2). The table used

abbreviation symbolized SD for strongly disagree, D for disagree, U for undecided, A for agree and SA for strongly agree.

**Table 2: Households' perception on climate change**

Symbol	Gender				
	Male	Percent	Female	Percent	Total Percent
SD	2	1.9	1	0.9	2.8
D	8	7.5	4	3.7	11.2
U	6	5.6	4	3.7	9.3
A	40	37.4	24	22.4	59.8
SA	16	15	2	1.9	16.9
Total	72	67.3	35	32.7	100

Source: Field survey, 2020.

Table 2 shows the households' perception on climate change in the study area. The Likert scale result indicates that the largest percentage of the households (59.8 %) were agreed on the impact of climate change in their farm-based livelihood activities. It is followed by the percentage of agreement in the second (16.9%) and least by the strongly disagreement (1.9%). Gender-based responses are similar to the households' perception on climate change.

Agreeing on the impact of climate change, one of the key informant said:  
 Now we have changed our traditional subsistence farming due to frequent effect of drought, erratic rainfall, and diseases. When there is no rain in time, planting has delayed, lack of irrigation has the effect of drought when there is a lot of rain, hail comes, and when the disease destroys the crop. It requires rainfall on time or irrigation facility, compost and cow dung. However, under the pressure of urbanization the number of animal is below productivity their profession with the change of weather. Therefore, we have changed our traditional practices into market-oriented cash crops, such as vegetable farming, floriculture, poultry, mushroom farming, fishing, and animal husbandry.

According to him, change in the nature of the crop has increased both labor and expenses. The cost of improved varieties of fertilizers, seeds, pesticides, deep boring, and human labor have increased. All of these changes may be due to climate change.

**Deforestation and Climate Change**

Forest is an important natural resource of Suryabinayak Municipality. The forest area has covered about 245.17 ha of the total area. The Cabinet in February 2015, had

decided to construct National Zoological Garden in Suryabinayak. However, deforestation is a major problem in this Municipality due to collection of firewood, fodder, and litter, grazing, and cutting down of trees. The local community seems to agree that deforestation will reduce water and increase temperatures. The perceptions of the local community about deforestation have shown in Table 3.

One of key informant stated that:

A decade ago, it used to be very cold in winter, the sun would shine the only afternoon, but now the sun comes in the morning, it doesn't feel so cold in the afternoon. Deforestation, construction of concrete houses and roads, and pollution of river water have played a role in climate change. Brick kilns, vehicles, and dust particles are also other contributing factors.

**Table 3: Local perception of deforestation and climate change**

Symbol	Gender				
	Male	Percent	Female	Percent	Total Percent
SD	-	-	-	-	-
D	1	0.9	-	-	0.9
U	2	1.9	-	-	1.9
A	44	41.1	20	18.7	59.8
SA	25	23.4	15	14	37.4
Total	72	67.3	35	32.7	100

Source: Field survey, 2020

Table: 3 shows the local perception of deforestation and climate change. The perception of the local community that deforestation will increase the temperature and decrease the rainfall has measured on Likert scale. The result indicates that 59.8 % of communities have found agreeing and 37.4% strongly agreeing with the relationship between deforestation and climate change.

### Adaptive Strategies of Climate Change

The local communities of the Suryabinayak Municipality are involved in diversified livelihood activities to earn their living. They have adopted a new market-oriented cash crop in changing situations. They seem to have two main reasons for changing traditional farming: urbanization and climate change. The size of our arable land is declining day-by-day due to urbanization, and it became difficult to fulfill family needs from traditional farming. As a result, they need additional inputs to increase productivity for addressing the growing demand. Thus, Thus, market-oriented cash crops, such as vegetables, poultry, animal husbandry, floriculture, and fishing, are better

alternatives to meet their food shortage (Table 4). However, the changing strategies are varying over space, and time depends on the amount and types of land (Subedi & Pandey, 2002; Khatiwada, 2014).

**Table 4: Households involved in farm-based livelihood**

Particulars	Gender				
	Male	Percent	Female	Percent	Total Percent
Vegetables	41	38.3	26	24.3	62.6
Poultry Farm	12	11.2	4	3.7	15
Animal Husbandry	12	11.2	3	2.8	14
Floriculture	2	1.9	-	-	1.9
Fish Farm	1	0.9	2	1.9	2.8
Others	4	3.7	-	-	3.7
Total	72	67.3	35	32.7	100

Source: Field survey, 2020

Table 4 shows the households involved in farm-based livelihood activities in the Suryabinayak Municipality. The result indicates that the majority of households (62.6%) have adopted vegetable farming as a source of income in the first. It has followed by poultry in the second (15%) and floriculture in the least (1.9%). The result of gender participation in the farm-based activities are also similar to the involvement of vegetable farming. One of the key informants reported:

The local community stated that we are involved in vegetable farming to generate better income than traditional farming practices. It requires a low amount of investment as compared to other occupations. It can operate by the involvement of one's family members. If the weather conditions and market prices are supporting, we take a better profit from this occupation. I am also involved in this profession over the generations. Now I am satisfied with this profession family member are directly or indirectly involved in vegetable farming.'

However, the next farmer said:

Farm-based livelihood activities are often considered a very high labor-intensive endeavor that is difficult to operate by the labor of women, older, and children for hoeing, manuring, weeding, irrigating, harvesting, grading, and marketing. Sometimes, we hired additional helping hands from outside when there is a lot of work. On the other hand, it requires investment to purchase high-yielding varieties (HYV) of seeds, chemical fertilizers, pesticides, irrigation, power supply, tools, and equipment.

The above two statements clarify the local adaptive strategy of the communities of the Suryabinayak Municipality is changing over the last two centuries. Denevan (1983) argues that 'lots of potential adaptations existed within any given livelihood system as there were always individuals in the group who would undertake slightly different approaches to farming' is still valid in the study area (cited in Moseley, Perramond, Hapke, & Laris, 2014, p. 96).

### **Investment in farm inputs**

Investment in agricultural inputs has increased after the adoption of market-oriented cash crops. They seem to have invested in buying chemical fertilizers, improved varieties of seeds, pesticides. Hiring labor in agricultural works, irrigation, and the sale of farm products will also increase the additional cost. They are discussed as follows:

**Chemical Fertilizers:** Chemical fertilizers have been extensively using to increase agricultural production in the region for the past four decades. They have been using different types of chemical fertilizers, such as phosphorus, potash, nitrogen, and urea. This paper the use of chemical fertilizers by farm-households in Suryabinayak Municipality. The result indicates that the majority of households (31.7 %) have been using chemical fertilizers. More than 30 percent seem to agree that the use of chemical fertilizers increases production.

High Yielding Varieties Seeds and pesticides: With the adoption of chemical fertilizers, improved varieties of seeds and pesticides have also been used to increased production in this area. One of the key informant reported that 'we cannot get better income from farming without the application of improved varieties of seeds and pesticides. So, we will give equal importance to purchase a high-yielding variety of seeds, fertilizers, and pesticides'.

The result indicates that the largest percentage of households (50.5%) using HYV seeds and pesticides to meet their food deficit. They seem to strongly agree that agricultural inputs are essential to the alternate impact of climate change.

### **Impact of Climate Change on Farm-based Adaptive Strategies**

Climate change seems to have affected the agricultural livelihoods of the municipal community. Their microeconomics of activity has comprised a process of producing food, fiber, and other products by cultivating fields and domesticating livestock. They are still dependent on agricultural activities such as vegetables, poultry, fishing, animal husbandry, etc. earn income. However, the spatial patterns of their livelihood activities are varies based on wealth, farm size, and level of education. Besides, municipalities and stakeholders do not seem to be able to promote the

agricultural sector. FAO (2009) projected the relationship between population growth and food production. For example, if the population grows by 30% in 2050, 70% of food products will require to meet that demand.

The perceptions of local communities are also important to analyze the possible impacts of climate change. As far as they know, most of the farms became barren due to the drought three years ago. There was no rain at the time of planting, but later that year, heavy rains flooded the area and had destroyed people, wealth, and crops.

The result indicates that 72 percent of households' report rising temperatures in the first, landslides in the second (8.4%), and drought in the least to affect farm-base livelihoods. One of the key informant said that:

We often analyze some of the attributes, such as droughts, exceed rainfall, diseases, crop failure, declining yields, and decreasing food security are an indicator of the effects of climate change. Besides, when water is scarce, more water needs in the fields. When production decreases, the price of food grains increases in the market, and our livelihoods are at risk.

**Household Income:** Household income has taken another example of the impact of climate change. When the community chooses market-oriented cash crops, their income also starts to increase. But their income varies from house to house, depending on the family's social status, culture, nature of crops, and amount and type of arable land. For example, the household income seems to be between Rs 500,000 (74%) and Rs 6 million (1.9%). Other factors like drought, disease, excess rainfall, lack of improved varieties of fertilizers, seeds, and pesticides, market prices are equally important to reduce production and productivity.

**Air pollution:** Air pollution and climate change are also closely related. It is mainly due to excessive pressure of vehicles, lack of sewerage system, lack of garbage management, lack of regulation of smoke control in brick kilns and factories, burning of agricultural residues, and emission of carbon dioxide. These factors support to depletion of the ozone layer and lower temperatures. Based on the Likert scale, 50.5 percent of households agree that air pollution affects climate change and crop production.

### Discussion

The Cronbach alphas used to analyze the validity and reliability test on the impact of climate change on local adaptive strategies in the study area. It is based on the precision and accuracy of measurement that represents sampling procedures suggested by Cohen, Manion, and Morrison in 2007. The Cronbach alpha provides a coefficient of

inter-item correlations that measures the internal consistency among the items. These statistics have measured by using the following formula:

$$\text{Alpha} = \frac{n r_{ii}}{1 + (n-1) r_{ii}}$$

Where,  $n$  stands for the number of items in the test or questionnaires  
 $r_{ii}$  for the average of all the inter-item correlations.

Let us imagine that the number of items in the survey is ten, then the computed average correlation is 0.738

Therefore,  $\text{alpha} = \frac{n r_{ii}}{1 + (n-1) r_{ii}}$   
 $= \frac{10(0.738)}{1 + (10-1) 0.738} = \frac{7.38}{7.64} = 0.97$

The computed alpha ranges from 0.60 to 0.90 and characterized to:

1. >0.90 very highly reliable
2. 0.80–0.90 highly reliable
3. 0.70–0.79 reliable
4. 0.60–0.69 marginally/minimally reliable
5. <0.60 unacceptably low reliability

Table 5 shows the Cronbach alpha to test reliability statistics.

**Table 5**

Cronbach alpha to test reliability statistic

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
.199	.060	42
Field Survey, 2020		

Table 5 shows the computed Cronbach alpha index. The standardized value of 0.97 is less than the table value (0.90). So, the legitimacy analysis of the impact of climate change on local adaptive strategies shows highly reliable. Because, the **alpha** coefficient for the items is 0.839, suggesting that the items have relatively high internal consistency. However, Cronbach's alpha simply provides us with an overall reliability coefficient for a set of variables (e.g., questions). Our questions reflect different underlying conditions based both biophysical and anthropogenic dimensions. In this situation, Cronbach's alpha will not be able to distinguish between these.

### Conclusion

Geographic studies are mainly seeking the causal relationship between two variables, like the farm-based livelihood activities and the impact of climate change.

Nowadays, the adaptation of climate change in agricultural activities has been paying interest not only to academic research but also in policy levels of national and international organizations, like the Suryabinayak Municipality, where more than 50 percent of the population dependent on this sectors. Among them, the largest number of people is moving towards miserable conditions due to climate change. The largest number of communities exposed to the impact of climate change through increased temperature, changes in rainfall patterns, and variations in intensity and frequency of extreme events of droughts and floods and ultimately influences food security due to crop failure.

The local communities of the Suryabinayak Municipality have been paying different adaptive strategies to mitigate the adverse effects of climate change. Their knowledge seems to be a useful asset for planning adaptation and mitigation of climatic threats in the study area. However, the issue of climate change is comprising a national as well as a global concern. The local communities seem to be aware to mitigate the impact of climate change by adopting alternative farming practices, such as vegetable farming, floriculture, poultry, fishing, mushroom farming and animal husbandry. The impact of climate change is a dynamic and evolving process. Thus, it requires a collaborative measure to address adverse conditions of climate change. For example, supply of higher-yielding and short growing vegetable seeds, chemical fertilizers, pesticides and other inputs like loan, irrigation facilities and mechanization tools to increase food security and household incomes.

This paper concludes that when weather conditions are favorable, then a high-yielding variety of seeds proved a success to generate considerable income. The majority of the community believes that local knowledge and skills are more effective than modern knowledge to address extreme conditions of the frequent droughts. Cronbach's alpha index and Likert scale have used to conclude the legitimacy analysis of the impact of climate change on local adaptive strategies shows highly reliable in the study area. However, there are no alternative livelihood strategies to adapt to the growing population as well as in impervious conditions. As a result, the participation of young people in these livelihood activities was gradually decreasing day-by-day. They were seeking alternative jobs in non-farm sectors, and most of them preferring foreign employment as a reliable source of income. Thus, the Local Government should promote local knowledge that is suitable in this locality.

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## Endurance of Women in Afghan Society in Khaled Hosseini's

### *A Thousand Splendid Suns*

#### (Book review)

Sedunath Dhakal\*

Women's condition in Afghan society as depicted by Khaled Hosseini in his novel *A Thousand Splendid Suns* is miserable. This novel focuses on how the women are victims of the patriarchal despotism, and also explores on the endurance as a typical characteristics of women in Afghan society.

Khaled Hosseini (2007) depicts the plight of Afghan women realistically in his novel, *A Thousand Splendid Suns*. It is about "the tragedy of Mariam's life. Rather it is better to say that this is the unavoidable destiny of many women. A woman is exploited everywhere" (Jana, 2013 P.7). Afghan women are living a pitiable life not only because of patriarchal social structure but also because of the war and crisis even in the 21<sup>st</sup> century. The women have been treated indifferently and have become major sufferers during the time of Russian invasion in Afghanistan. It is a story of women's sufferings and endurance on the one hand, and hopes and struggle for living on the other. Hosseini (2007) depicts a pathetic life situation of women, as he writes about the condition of a major female character of the novel; "Nana has been one of the housekeepers. Until her belly to swell"(P. 6). Nana's daughter, Mariam and her husband Rasheed's second wife Laila suffer a lot; but both of them have an unbelievable endurance to tolerate even in the difficult situation.

Women have a typical quality of endurance even in the most difficult situation, as Nana says, "It's our lot in life, Mariam, women like us. We endure. It's all we have" (Hosseini, 2007, P. 18). Both Mariam and Laila, who were forced to marry Rasheed, had to face the same problem being physically and mentally oppressed from him. They make a mutual bond to support each other and try to resist over the extreme form of domination. They were the victims of patriarchy at the domestic level manifested as the domestic violence on the one hand, and the socio-cultural Taliban rule on the other.

During Taliban's tenure, women were treated inhumanely. Sharia Law<sup>+++++</sup> was enforced which restricted women from enjoying their fundamental natural rights.

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Women were discriminated, marginalized, and they had no rights to enjoy their fundamental rights which resulted a deteriorating socio-economic situation of women in the areas controlled by Taliban. Women were forced to put on Burqa all the times. During those days, there was severe gender discrimination. They were allowed to study. Women could only read Quran and that too, until the age of 8. After 8, they were strictly prohibited to get education. Some of the restrictions according to Sharia Law against the women as quoted by Hosseini (2007) in the novel are:

You will not wear charming clothes.

You will not speak unless spoken to.

You will not make eye contact with men.

You will not laugh in public. If you do, you will be beaten.

You will not paint your nails. If you do, you will lose a finger.

Girls are forbidden from attending school. All schools for girls will be closed immediately. Women are forbidden from working.

If you are found guilty of adultery, you will be stoned to death. (P.271)

Women have been forced to tolerate exploitation and tyranny by the males. Males' heart is cruel against women as Nana told Mariam;

A man's heart is a wretched thing. Mariam, it is not like a mother's womb. It won't bleed. It won't stretch to make room for you. I'm the only who loves you. I'm all you have in this world. Mariam, and when I'm gone you'll have nothing. You'll have nothing. You're nothing. (P. 27)

As Hosseini (2007) writes the socio-cultural system itself has discriminated the women. The birth of a son is supposed to be taken as the doorway to heaven as he writes: "Boy is better, Mariam jan, they carry the family name-- " (P. 66) Hosseini illustrates how political aggression and the influence of power in Afghanistan that keep changing right from the invasion of Russian troops to the post Taliban tenure affects in the socio-cultural system that created the oppression upon the women. Due to warfare, women have always been compelled to face the oppression either by government or society and above all males themselves as Mariam told Nana "Like a compass needle that points north, a man's accusing finger always finds a woman. Always." (Hosseini, 2007, P. 7)

The sexual exploitation with physical torture has also been shown in the novel Rasheed terrorizes his wife as Hosseini (2007) writes;  
All these years and still she shivered with fright when he was like this, sneering, tightening the belt around his fist, the creaking of the leather, the glint in his bloodshot

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\*\*\*\*\*The code of law derived from the Koran and from the teachings and example of Mohammed

eyes. It was the fear of the goat, released in the tiger's cage, when the tiger first looks up from its paws, begins to growl. (P. 145)

During the reign of Taliban from 1996 to 2001, women had to tolerate worse situation than in any other time or by any other society. The Taliban started implementing the traditional fundamentalist Islamic ideology that caused an institutionalized system of gender discrimination that limited the women only inside the house. Under the rules of Taliban all the natural rights of the women were completely denied as mentioned in the novel;

You will stay inside your homes at all times. It is not proper for women to wander aimlessly about the streets, if you go outside, you must be accompanied by a maharam, a male relative. If you are caught alone in the street, you will be beaten and send home. (Hosseini, 2007. P. 271)

The story of *A Thousand Splendid Suns* records thirty years of Afghan history along with miserable condition of women, indifference of the authorities towards the suffering and deteriorated life they are bound to live in. Many women were abducted and given to others as slaves or forced into marriage, dragged into prostitution and raped. Sexual violence has been easily accepted in society. The males were legitimized oppressor in the name of social control. The women became major sufferers due to violence, cruelty, brutality, and oppression that were perpetrated by the ruling authorities. Ketu H Katrak (2006) writes, "women bear the worse violence in these horrific events in terms of violence on their bodies-rape and dislocation of home, family and community" (P.113).

Mariam and Laila, in Husseini's *A Thousand Splendid Suns*, represent typically Afghan women who are marginalized and are often treated as the possession, the objects or pets. They are restricted to take part in socio-cultural and political activities. They are blamed and even punished for the offence they have not committed. The law of the country turned against them and exercised male domination as a legitimized system of the country.

Mariam and Laila had different upbringings, yet, they have same fate, sharing same abusive husband and marital oppression. Mariam connects Aziza as her own reflection; Aziza has also become *Harami* like Mariahm and Laila who became companion to endure the torture that Rasheed imposed. They both share sadness of losing their most loved ones.

Mariam is shown a matured Afghan woman who knows well how to tolerate in any unfavourable situation that she has to face in her life. She is full of patience; she has endured her mother's suicide, her father's deception, mismatching husband, unimaginable marital life, constant poverty and lifelong physical and mental burden. Still she seems peaceful and hopeful for the days that she thinks will come with all joy,

freedom and happiness. She tries to fulfil the dream of Laila as her own dream. While, on the other hand, Laila represents later generation in Afghanistan who understands the value of education, women rights, who dreams of freedom in the land where Taliban restricts even for a very fundamental needs of women. But she also becomes helpless due to the widespread war and scattered family. She does not have any rights of resisting the system directly but she tries to do so by avoiding such culture and new law and escape to Pakistan to struggle for existence. Mariam and Laila two different characters in Hosseini's novel portraits two distinct quality and personality which may not be powerful when counted individual, but becomes really strong when they are put together. Laila tried to give Mariam new life. Mariam, who had become aimless, finds her life is worthy when she becomes the mother of Laila and Aziza. The repressed emotion was turning as her strengths each day she saw Laila troubled by her husband. Finally, she surpassed her fear of being beaten severely or murdered and resisted directly when it was on the life and death of Laila. Laila's education had made her alert about the present situation of women in Afghanistan. She become logical putting forward her views. She symbolizes modern Afghan women who dreams of equality, talks about women rights and dares to cross the patriarchal boundary. She presents different worldview to look at which gradually turned Mariam into a different woman than what was she defined or acted differently than she was expected. Laila learnt a lot of things from Mariam, knew how to raise children and have control over her own emotion with the help of Mariam. She finds herself safe near Mariam despite all torture and violence upon her. The closeness and unity of Mariam and Laila becomes strength for Afghan women who seem to be tolerating, hopeful and ultimately powerful to fight against the males.

As described above, Hosseini presented the difficult life situation of women who have been suffering a lot in Afghan society in this novel. Women are the victims of both domestic violence and cultural domination.

There are many factors responsible for having such gender biasness in Afgan societies. Afghan society has been affected by its long time war and internal conflict. It has more impacts upon the lives of women. Women have the capacity to endure all difficult situations they face in the family and in their society as Hosseini has depicted in *A Thousand Splendid Suns*. They struggle hard with the hope for better tomorrow. The main characters of Hosseini's novel, both Mariam and Laila show their quality of endurance. Afghan society practises domestic violence against women and that is taken normally. If the husband cannot control women, he is taken as a coward in front of other males. If the woman attempts to revolt against it, the society takes it negatively and attacks her; that attack becomes legitimized and women have to tolerate. That is how the women have been living there.

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