

ISSN 2362-1133

**THE
JOURNAL
OF
ACADEMIC
DEVELOPMENT**

Vol. 4

February, 2016

A Publication of
Research Management Cell
Rammani Multiple Campus
Tilottama-6, Manigram, Rupandehi, Nepal

The Journal of Academic Development

Vol. 4

February, 2016

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Price: : NRs. 300
U.S. \$ 10

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SOCIAL DISCRIMINATION AGAINST WOMEN IN TRADITIONAL HINDU SOCIETY

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ABSTRACT

Women are indeed the pillars of society. Their role is innumerable in sustaining social harmony and unity in socioeconomic setups. However the basis of our socioeconomic backbones rests on males in most cases and women are for the most part sidelined and if they have any roles at all, it is passive. This is in the context of Hindu society in general and Nepali society in particular. That said, Nepal constitutes different ethnic, cultural and religious societies. As such this research is limited to traditional Nepali Hindu society only. From birth to death women are considered subordinate in traditional Hindu society despite the fact that traditional societies are falling apart and they are losing their age-old values. To put it simply women are unwelcome beings in traditionally rooted social structure. In other words, they are un-preferred babies if their parents have the choice of the son. Girls are deemed liabilities. As such in ancient Hindu society parents choose to send them away as soon as possible, even prematurely through marriage. They stand as a burden to their parents until their marriage as commonly perceived in a traditional Hindu family.

Keyword: *Hindu society, Kul puja, Ramcharitmanas, Hidimba, Pandavas.*

BACKGROUND

Nepalese society is traditionally rooted because family structures, values, living patterns, belief-systems are also ancestrally rooted notwithstanding a few changes and transformation are seen on the modern horizon of Nepali Society. The majority still wish for boys over girls as their children. In most rituals like *Puja* and at ceremonies like *Kul puja* and *Shraddha* the role of women is subordinate. Women are still getting abused. One of the reasons why men are having dominant roles in Hindu society is in some of the great scriptures and religious texts they are presented as lesser beings driven by carnal desires. Their characters are presented as unvirtuous. They are even kept on par with slaves and as such their roles in Hindu society is subservient. However things are changing, though at a slower pace in rural communities in Nepal, in urban Nepal in recent times. Today, Nepali society is undergoing a series of transformations. Modern educated women particularly do not choose to live confined within traditionally imposed socioeconomic setups. They are indeed breaking through their traditional barriers and are emerging daringly in various socioeconomic and political roles. They rebel against all impositions, coercions and oppressions to have their strong say in all socioeconomic matters and decision making processes. However, they represent a small minority and constitute urban

females. But the majority in rural communities are living subserviently under male dominance. The subject this research paper relates to is about the common rural woman living in traditional family setups and adhering submissively to society, culture and religion imposed regulations. They are bound to age old customs, rites and practices which subvert their natural tendency at par with their male counterparts. However against all these challenges a minority of this female society is emerging, proving themselves internationally on different socioeconomic fronts, yet this part is negligible in the totality of womankind in Nepal. Thus, we limit our research to socioeconomically handicapped women in Nepal.

OBJECTIVES

The objective of present paper is to analyze the root causes that have a central role in degrading the status of women in Nepal in particular and in Hindu society in general.

RESEARCH METHODOLOGY

In order to analyze the current status of women and the causes that account for the plight of the majority women residing in traditional communities, materials for this research paper are taken from different primary as well as secondary sources. From articles published in newspapers, magazines at different periodic intervals in Nepal and internationally to books both ancient, religious and modern are used for this research. And also direct observations in traditional societies were carried out for the source materials.

DISCUSSION

Discrimination against women is a human tendency observed, though in varying degrees, in most traditional societies. Of course when a society evolves and does economically well and advances educationally social discrimination becomes less noticeable. In developed countries it is found in lesser degrees as they become more and more educated and financially self-reliant. In a country like Nepal social systems are pillared on traditional norms and practices. As such to get over these age old practices a great deal of efforts is demanded of women themselves. A good education, social awareness activities will be catalytic to this end. Reinterpretation of our religious texts, like the laws of Manu, rewriting of our moral science, introduction of education on gender equality in schools and colleges could help to eliminate such discrimination to some extent.

To understand the very fabrics of Nepali or Hindu society the study of ancient scriptures, epics and ancient social systems is needed. To this the search is limitedly done through quoting a few examples from some of the most popular books of Hinduism. The books Hindus refer to frequently are the Laws of Manu, the *Mahabharata*, the *Ramcharitmanas* in most contexts.

These lines from the Laws of Manu illustrate the fact about discrimination against women in one of the great ancient scriptures:

Though destitute of virtue, or seeking pleasure (elsewhere), or devoid of good qualities, (yet) a husband must be constantly worshipped as a god by a faithful wife.

This is mockery. Modern day women would not agree for it is totally against their freedom. Chastity is no doubt a virtue, however, today's women do not want to keep up it at the expenses of their lives. Though this system is anciently enforced upon women, modern women are combating to set them free from such subordinations. However if we visit some of the remote villages wherein no access to modern education is found, women are still subjected to a variety of tortures and beastly treatments.

Her father protects (her) in childhood, her husband protects (her) in youth, and her sons protect (her) in old age. (Buhler, 1886)

This decree is not at all relevant in the context of the modern woman. This is against her timeless endeavor for emancipation. She distastes all kinds' protections, though protection sounds good. This kind of control is not patronage. Modern women advocate for empowerment so that she can live independently though many live in alliance with the rest of her family members whether it is father, mother, brother or husband and son. She wants her space, socioeconomic freedom. She wants to do things out of her personal choice not through any kind of impositions by others. Therefore the above line in the Laws of Manu is averse to her emancipation, freedom and independence.

In like manner, even a greatly revered saint like *Tulasidas* also in his widely read *Ramcharitmanas* is evidently found writing discriminately against women. "*Dhhola gavâra sudra pasu nâri, sakala tadana ke adhikâri.*" Meaning- A drum, a rustic, a Sudra, a beast and a woman all these deserve instructions. (Growse, 1914)

Men always have supremacy over women since time memorial. Let us look at one of the interesting stories in the *Mahabharata*. Men are always considered sacred and women are considered to be instruments. Men, especially of a civilized tribe can use women of barbaric tribes. Women, particularly from somewhat socially disadvantaged societies are portrayed as seductresses. For example *Hidimba*, in the story of the *Mahabharata*, was sent by her brother *Hidimba*. When *Hidimba* came across the *Pandavas* along with their mother *Kunti* who were all asleep except *Bhima* who was on guard. She was infatuated by his body and prowess. *Bhima* was depicted as an austere, disciplined person and *Hidimba* on the contrary as a seducer. Here the author of the *Mahabharata* has presented *Hidimba* as a woman driven by her carnal desire and *Bhima* as a man who has all his desires and passions under control. She was presented as a lusty woman

and *Bhima* ascetic. How *Bhima* compares his character with that of *Hidimba* is presented in the *Mahabharata* in the following lines:

“O *Rakshasa* woman, who can like a *muni* having all his passion under control, abandon his sleeping mother and elder and younger brothers? What man like me would go to gratify his lust, leaving his sleeping mother and brother as food for a *Rakshasa*?” (Ganguli, 1883)

One other story in the *Mahabharata* is about *Ulupi*'s desire that narrates how the *Naga* Princess *Ulupi* tries to drag *Arjuna* to fulfill her lust.

“.....the mighty armed hero (*Arjuna*) was dragged into the bottom of the water by *Ulupi*, the daughter of the king of the *Nagas*, urged by the god of desire” (Ganguli, 1883)

In the stories both *Bhima* and *Arjuna* were depicted as austere, faithful but both *Hidimba* and *Ulupi* were presented as some ones lustful driven by lower instincts and carnal desires. What is more the descriptions or implications of these two women end up with these episodes. They have no place in the rest of episodes or the royal family of the *Pandavas*.

Women are often caught in a vicious circle of economic dependence, fear for their children's lives as well as their own, repeated pregnancies, shame, ignorance of their rights before the law, lack of confidence in themselves and social pressures. Fear of harming a husband's career and apprehension about the attitude of the police also prevent women from reporting crimes of domestic violence and make them susceptible to the violence. (Bhatt, 2008)

Women in Nepal face abuse but the real problem is nobody wants to talk about it. (Thapa, 2015)

CONCLUSION

The gender issue is a universal and timeless one since it is prevalent at all times and everywhere in different degrees. However women in traditional society or family suffer more than in modern society, for in modern society they enjoy a better degree of economic independence. Discrimination against women is rampant in Nepal and in the rest of other countries though in different degrees. In modern times it is somewhat improving as women are also getting economically more and more independent. The root cause of discrimination is ancient practices in which females are deemed lower by birth. Females are not given the same right compared with their counterpart males in traditional social setups. Sons are considered superior since they inherit parental property. When parents die it is their sons who have to perform all the rituals and daughters are not allowed to do the same. At the same time violence against women are observed in many families particularly when males become drunk and become rowdy. All that is needed to eliminate these social ills is a good education. Women must be educated to make aware of their rights. Or else all the tortures they undergo will be taken as their fate or as not eliminable destiny. No laws or enforcements will work as long as these discriminations against women remain deeply seated in the very root of society. As illustrated in the main body of this research paper, our society is traditionally or

ancestrally male-dominated which is evident even in our ancient scriptures like *Manusmriti*. People in society take what is written in the laws of Manu for granted and as such society continues to dominate and discriminate against women. Therefore the single most important thing that can eliminate this age-old and traditionally deep rooted discrimination against women is through the right education and awareness programs

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AN OVERVIEW OF FEMINIST CRITICISM AND EXPLICATION

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ABSTRACT

The present paper is an attempt to define feminist criticism with its background. It has explained Feminist criticism in detail with its explication to William Blake's poem 'The Sick Rose'. And it provides the readers with a concept and an insight to perceive and explicate feminist criticism. Further, it depicts the gender hierarchy in patriarchal society how females have been objectified.

INTRODUCTION

Feminism is the belief and aim that women should have the same rights and opportunities as man (O.A.L.D.). As a distinctive approach to literature, feminism was introduced in the 1960s. It took two centuries' struggle for the recognition of women's cultural roles and achievements for women's social and political rights. Lillian S. Robinson states:

For more than a decade now feminist scholars have been protesting the apparently systematic neglect of women's experience in the literary Canon, neglect that takes the form of distorting and misreading the few recognized female writers and excluding the predominantly male authors in the canon show us the female character and relation between the sexes in a way that both reflect and contribute to sexist ideology—an aspect of these classic works about which the critical tradition remained silent for generation (106).

Some feminists are socialists. There is a parallel between the notion of class oppression and gender oppression. Consciousness of these oppression is a major source of revolutionary or reformist ideologies in modern societies. Some feminist believe that women oppression can be understood only within a large understanding of class oppression. Warhol and Price Herndl express :

Feminist critic generally agree that the oppression of women is a fact of life, that gender leaves its traces in literary texts and in literary history and that feminist criticism plays a worthwhile part in the struggle to end the oppression in the world outside of texts----feminists are always engaged in an explicitly political enterprise, always working to change existing power structures both inside and outside academia. Its overtly political nature is perhaps the single most distinguishing feature of feminist scholarly work.(Warhol & Price Herndl 1991: x) Certainly the

assumption of women's inferiority goes back to a long way Aristotle declared that the female is female by virtue of certain lack of qualities. One might see a continuity between this and Freud's assumption that female sexuality is shaped by penis envy.

STATEMENT OF THE PROBLEM

The women have been treated as weak, submissive and dependent. However the society cannot be ideal without their existence. The women are being discriminated politically, economically and psychologically. The patriarchal society has made them internalize the norms and values of patriarchy. The culture privileges men by promoting gender roles. Women do not learn to resist patriarchal thinking by becoming a part of patriarchal power structure.

OBJECTIVE

The paper contains the following objectives:

- i- To analyze the women's position in the society from the past to the present.
- ii- To establish gender equality by enlightening women.

METHODOLOGY

The paper is an analytical study of women's position in the society. It is based on different secondary sources. It examines the gender issues that have been prevalent since ancient period. It takes support of feminism and Marxism. This study is to achieve the inherent strength in women's mind by applying psychoanalytical method.

DISCUSSIONS

Feminist criticism is not a uniquely twentieth century phenomenon. It antecedents going all the way back to ancient Greece in the work of Sappho and arguably in Aristophanes' play *Lysistrata*, which depicts women as taking over the treasury in the Acropolis, a female chorus as physically and intellectually superior to male chorus and the use of sexuality as a weapon in an endeavor to put an end to the distinctly masculine project of the Peloponnese war. Feminism also surfaces in Chaucer's *Wife of Bath*, who blatantly values experience over authority and was more than a match for each of her five husbands. In the Middle Ages, Christine de Pisan had the courage to enter a debate with the predominant male critics of her day. During the Renaissance a number of women poets such as Catherine Des Roches emerged in France and England. In the 17th century writers such as Aphra Behn and Anne Bradstreet were pioneers in gaining access to the literary profession. After the French Revolutions, Mary Wollstonecraft

argued that the ideals of the revolution and enlightenment should be extended to women primarily through access to education. She disagrees with the male behavior towards female. She states:

How grossly they insult us only to render ourselves gentle domestics brutes. For instance, the winning softness so warmly and frequently, recommended that governs by obeying. What childish expressions and how insignificant is being ...Can it be an immortal one? Who will condescend to govern by such sinister methods? (20).

The nineteenth century witnessed the flowering of numerous major female literary figures in both Europe and America ranging from Mone de Stael, the Brontes, Jane Austen, George Eliot and Elizabeth Barrett Browning to Margaret Fuller and Emily Dickinson. Modernist female writers included Hilda Doolittle, Gertrude Stein, Katherine Mansfield and Virginia Wolf. Henrik Ibsen is one the feminist writers who has played an important role to defend women's rights. In Doll's House, he has depicted Nora as a bold woman. He portrays:

Nora: I don't believe that. Hasn't a daughter the right to shield her father from worry and anxiety when he is old and dying? Hasn't a wife the right to save her husband's life? I don't know much about the law, but there must be something somewhere that says that such things are allowed. You ought to know about, you are meant be a lawyer, aren't you? You can't be very good lawyer, Mr Krogstad (1049).

Traditional Gender Roles

Traditional gender roles cast men as rational strong, protective and decisive. They cast women as emotional, weak, nurturing and submissive. Even some women are patriarchal. The women have internalized the norms and values of patriarchy. The culture privileges men by promoting traditional gender roles. The gender roles have been used to establish inequities.

Germaine Greer argues that whatever kind of feminine stereotype to which women are supposed to conform, it is necessarily a construction of patriarchal capitalism. Women are empty symbols, dolls to be used to show off the wealth of their men:

The stereotype is eternal feminine. She is the sexual object sought by all men and all women. She is of neither sex, for she has herself no sex at all. Her value is solely attested by the demand she excites in others. All she must contribute is her existence. She need never give positive evidence of her moral character because virtue is assumed from her loveliness and her passivity...There are stringent limits to the variations on

the stereotype, for nothing must interfere with her function as sex object. She may wear leather as long as she can't actually handle a motorbike She may wear rubber; but it ought not to indicate that she is an expert diver on water skier. (67-68).

The women are excluded from excess to leadership and decision making positions, paying men higher wages than women for doing the same job. Patriarchy promotes the beliefs that women are innately inferior to men. This belief in the inborn inferiority of women is a form of biological essentialism because it is based on biological differences between the sexes that are considered a part of our unchanging essence as men and women.

The belief that men are superior to women has been used to justify and maintain the man Monopoly of positions of economic political and social power to keep women powerless by denying them educational and occupational means of acquiring economic , political and social power. The inferior position long occupied by women in patriarchal society has been culturally, not biologically produced. In 'A Doll's House' , Henrik Ibsen reveals:

Helmer: Didn't you say no one had been here?(Wags his finger). My little songbird must never do that again. A songbird must have a clean beak to sing with, otherwise she will start twittering out of tune. (Puts his arm around her waist). Isn't that the way we want things.Yes of course it is. (Let's go of her). So let's hear no more about that (1050).

It is thought that females must be obedient, dependent, submissive, beautiful, sweet and young if they are to be worthy of romantic admiration. Marriage to the right man is a guarantee of happiness and the proper reward for a right minded young man. If a woman does not accept her patriarchal gender role , the only role left for her is that of a monster. The concept of good girl and bad girl is also sexist ideology to continue the influence upon us. If she accepts her traditional gender role and obeys the patriarchal rules, she is a good girl. If she doesn't, she is a bad girl. These two roles view women only in terms of how they relate to the patriarchal order.

According to patriarchal ideology in full force through 1950s, versions of which are still with us today. Bad girls violate patriarchal sexual norms in some way. They are sexually forward in appearance or behavior or they have multiple sexual partners. Men sleep with bad girls but they don't marry them. 'Bad girls are used and then discarded because they don't deserve better and probably don't even expect better. It is interesting to note that patriarchy objectifies both bad and good girls. Like objects, women exist according to patriarchy, to be used without consideration of their own perspectives, feelings or opinions.

French Feminism

French feminism has offered some strategies to get beyond patriarchy. It is diverse in its form. It consists of different points of view. It believes in the importance of social and political activism in order to ensure equal opportunity and equal access to justice for women. French Feminism focuses on two forms: Materialist Feminism and Psychoanalytic Feminism. The first form is interested in the social and economical oppression of women while the second form concentrates on women's psychological experiences.

French Materialist Feminism examines the patriarchal traditions and instructions that control the economic and material conditions by which society oppresses women. Beauvoir's *The Second Sex* created a theoretical basis for materialist feminist. In a patriarchal society, Beauvoir observes, men are considered essential subjects, while women are considered contingent beings. Men can act upon the world, change it, give meaning, while women have meaning only in relation to men. One of many thinkers influenced by Beauvoir, Christine Delphy offers a feminist critique of patriarchy based on Marxist principles. She focuses analysis on the family as economic unit. She points out:

All contemporary 'developed societies...depend on the unpaid labour of women for domestic services and child-rearing. These services are furnished within the framework of a particular relationship to an individual (the husband) They are excluded from the realm of exchange [i.e. these services are not treated like the jobs people do for money outside their own home] and consequently have no value. They are unpaid. Whatever women receive in return is independent of the work which they perform because it not handed out in exchange for that work (i.e. as a wage to which their work entitles them) , but rather as a gift. The husband's only obligation, which is obviously in his own interest, it is to provide for his wife's basic needs, in other words he maintains her labour power(60).

In contrast to Materialist Feminism, French Feminist Psychoanalytic theory is interested in patriarchy's influence on women's psychological experience creativity. Its focus is on the individual psyche.

Explication of Feminism to William Blake's 'The Sick Rose'

O Rose thou art sick

The invisible worm

That flies in the night

In the howling storm

Has found out thy bed

O crimson joy

And his dark secret love

Does thy life destroy?

William Blake, the 19th century English poet has used the rose as a symbol in this poem. It is not an allegorical poem. Blake's rose is a personal symbol. It infers his lamentation for a crimson rose which has been sickened unto death by a dark and secret worm. This poem reinforces patriarchal ideology through its presentation of symbolic characters. Patriarchal assumptions play effective role to oppress women. It depicts the tyrannical role of a male. It is an illustration of an inappropriately cruel behavior of a male. The black worm stands for a male who plays a destructive role upon a woman's life. As a traditional gender role, the male is presented as strong and subject. His behavior is considered instinctual. Night stands for the chaotic atmosphere. The male makes it stormy so that the female loses her ability to decide right or wrong. The howling storm stands for patriarchal norms and values that always trap the female. It also shows that male's nature of objectifying women. The phrase dark secret love shows that the male appears as an opportunity seeker in chaotic situation where as women are innocent and open. The rose stands for a woman. She has been depicted as weak and submissive. She has been objectified. She has been sexually harassed. She has not learnt to resist cruel behavior of a man becoming a part of the patriarchal power structure. The woman's acquisition of power within the existing social political system is not adequate to change the system. She is not the person in her own right. She is a kind of alien in the men's world. This situation leaps to the mind of many feminists. Even we feel discomfort in the poem's presentation of the female character. It evokes our sympathy to see the woman's vulnerable life. The poem focuses on the woman's sexual obligation to a man. The patriarchal society teaches females to tolerate the harassment.

CONCLUSION

The patriarchal society has been keeping the male at the centre the women on the edge. It has been marginalizing female adding some so called qualities to them. Along with the awareness and education, the feelings of equality arose. Feminism began resisting against patriarchal society and its norms and values. It alerts the women revealing their position from past to the present. It also suggests them not to be the part of patriarchal structure because they cannot rebel against its tyranny internalizing it.

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ADSORPTIVE REMOVAL OF Cr (VI) ONTO CHEMICALLY MODIFIED APPLE WASTE (CAW)

Dinesh Gautam

ABSTRACT

Chemically modified apple waste namely charred apple waste (CAW) was prepared at pH 6 as an adsorbent for the removal of heavy metal. Thus prepared adsorbent has been found to be effective in the adsorption of Cr (VI) from aqueous medium. The efficiency of the adsorbent in the removal of Cr (VI) was evaluated by batch adsorption method. The effect of initial concentration, contact time and pH of the solution was investigated. The maximum adsorption capacity onto this adsorbent was found to be at their optimal pH 1 for chromium.

INTRODUCTION

Heavy metals are toxic pollutants released into the environment as a result of different activities such as industrial, mining and agricultural activities (Hawari and Mulligan, 2006). These include metals such as Pb(II), Fe(II), Fe(III), Ni(II), Zn(II), Cd(II), Cr(VI), Cu(II), Al(III) etc (Mathialagan and Viraraghavan, 2002). These heavy metals can be distinguished as the toxic pollutant, since they are non-biodegradable. The metal ion pollution in water is one of the burning problems in different parts of the world (Lee and Yang, 1997). The presence of these metals in streams and lake leads to bioaccumulation in living organism from drinking water sources causing health problems in animals, plants and human beings (Baird, 1995). Water pollution is a major environmental problem faced by modern society that leads to ecological disequilibrium and health hazards (Castro-Acuna *et al* 1997). Heavy metal ions such as copper, cadmium, lead, nickel and chromium, often found in industrial waste-water, present acute toxicity to aquatic and terrestrial life, including humans. Thus, the discharge of effluents into the environment is a chief concern. The methods commonly used to remove toxic heavy metals from municipal and industrial waste water are based on the adsorption of ions onto insoluble compounds and the separation of the sediments formed. Many efforts have been made recently to find cheaper pollution control methods and materials (Ali and Bishtawi, 1997). Recently, biosorption has emerged as

an alternative cost effective ,environmental friendly and successive technology for heavy metal removal due to it' s high metal uptake capacity (Nurchi and Villaeswsa , 2008). Biosorption is an effective and versatile method for removing Fe(II), Cr (VI), Al(III) and other heavy metals from heavy metal contaminated effluents. Recently, many researchers are focused on the use of waste materials as adsorbent for removal of heavy metals from industrial waste water, as they are eco-friendly, cost effective and more efficient. Chitosan, chitin, sugarcane bagasse, apple and orange juice residue, wheat straw, rice husk, tea waste have been investigated as bio-adsorbent for removal of heavy metals (Babel and Kuraniawan, 2003). Those biomaterials have been recognized as the potential alternative to conventional technologies for the removal of heavy metals from the waste water. Thus it is possible to effectively recover valuable metals and remove toxic metals from the wastewater by using low cost biomass wastes as such and, consequently it would be a good solution for the difficult problems as mentioned above (Baral *et.al*, 2002). The activated carbon is commonly used as an adsorbent for the removal of metal pollutants present in water and waste water. However it only can be applied for the treatment of trace concentration of pollution. In spite of its effectiveness in the removal of metals pollutants from waste water, the high cost of activated carbon has restricted it's more widespread use (Mathilagan and Virarahavan, 2002). There are numerous approaches studied for the development of low cost adsorbent and concluded that the uses of low cost adsorbent may contribute to sustainability of the surrounding environment and offer promising benefit for commercial purpose in future (Chaib and Hattab, 2007). The adsorption efficiency of the agricultural wastes can be enhanced by various methods such as thermal activation, steam activation, chemical modification, chemical activation and so on (Adhikari, 2009). In our country, lots of biomaterial like rice husk, sugarcane bagasse, maize barn, apple waste are easily available as waste material. Apple (*pyrusmalus*) is one of the very popular fruit .Apple plant are especially found in hilly region of Nepal. Juice vending centers in different location of Kathmandu valley produces quite appreciable amount of apple waste. The apple waste thus produced from such location can be converted into cost effective and environmental friendly bio-adsorbent by chemically modification (charred and phosphorylated) which may be a potential material for adsorption of heavy metals from heavy metal contaminated effluents. In the present study, the apple waste was modified

into an effective adsorbent which has been studied for the adsorption of Fe(II), Cr(VI) and Al(III) metals from aqueous solution.

Health Hazards

Heavy metals are defined as those metal and metalloids generally considered to be of sufficient distribution and abundance as to be in some way environmentally or biologically significant as toxic substance. These includes metal such as cadmium, lead nickel, cobalt, chromium, zinc, iron, silver, Aluminium, gold, mercury etc. These are released into natural water by industrial and domestic wastewater discharge. These heavy metals are non-biodegradable thus lead to accumulation of this metal in different sensitive organs in organism causing health problems. In human heavy metals are accumulate in kidney, heart and brain. The accumulation of cadmium and lead in kidney at overdose spilling proteins in the urine and disrupting protein metabolism. Cadmium toxicity has been the cause of Japanese Itai-Itai disease. The presence of cadmium and lead in high amount may be the cause of heart disease; mental retardation, slow growth; neuro disease and malfunctioning of live in human beings.

Chromium(VI) is a danger to human health, mainly for people who work in the steel and textile industry. People who smoke tobacco also have a higher chance of exposure to chromium.

Chromium(VI) is known to cause various health effects. When it is a compound in leather products, it can cause allergic reactions, such as skin rash. After breathing it in chromium(VI) can cause nose irritations and nosebleeds.(Retrieved from www.en.wikipedia.org.com)

LITERATURE REVIEW

Literature shows that removal of different heavy metals from aqueous solution can be done by ion-exchange, precipitation, electrolytic recovery, Chelating, solvent extraction and liquid membrane separation. These methods are not widely used due to their technical as well as economic constraints, so much attention has been given to investigate the cost effective technique. Recently uses of biological waste material for the heavy metal removal have been increasing because of their high metal uptake capacity and cost effective nature. Adsorption process has been found to be

one of the alternatives to lower down the concentration of different heavy metals like Cr(VI), Fe(II) and Al(III) etc.

N.Sankaramakrishnan et al. (2006) modified chitosan flakes with 4% w/w acetic acid, 2M NaOH solution to make beads. Those chitosan beads and flakes were cross linked with glutaraldehyde and the cross linked xanthated with 14% NaOH and carbon disulphate such cross linked xanthated chitosan flake had maximum adsorption capacities of 625 mg/g for Cr(VI) white beads had q_{max} equal to 256.4 mg/g.

Elangovan et al. (2008) presented the results of Cr(VI) and Cr(III) sorption from aqueous phase by palm flower (*Borassus aethiopicum*). Batch kinetic and equilibrium experiments were conducted to determine the adsorption kinetic rate constants and maximum adsorption capacities. Both Cr(III) and Cr(VI) adsorption followed second-order kinetics. For Cr(III), maximum adsorption capacity was 6.24 mg/g by raw adsorbent and 1.41 mg/g by acid treated adsorbent. In case of Cr(VI), raw adsorbent exhibited a maximum adsorption capacity of 4.9 mg/g, whereas the maximum adsorption capacity for acid treated adsorbent was 7.13 mg/g.

Phurada et al. (2011) studied optimal condition for adsorption of Cr(VI) on DP and found that pH 2, contact time 30 min and initial Cr(VI) concentration 75 mg/l. Langmuir isotherm and pseudo second order were well fitted with experimental data, so they were used to explain the adsorption mechanism. The maximum adsorption capacity was 10.67 mg/l. Moreover, the desorption ability was 63.78% at 0.1M HCl.

Krishna et al (2013) studied use of custard apple peel powder for removal of Cr(VI) from aqueous solution and found that it is capable of removing Cr(VI) from aqueous solution, up to 90.47% for an initial concentration of Cr(VI) 5 mg/l, adsorbent dosage of 0.49, adsorbent size of 63 μ m, pH=3 and at a temperature of 303K.

OBJECTIVES

The major specific objectives of the present paper are as follows:

- To prepare adsorbent from the apple waste and also to find out the nature of adsorption isotherm followed.
- To analyze the kinetics of adsorption process.

- To investigate the effect of pH, initial concentration of adsorbent & contact time on the removal of heavy metals such as Cr (VI).

METHODOLOGY

The following experiments have been made to achieve the results:

Preparation of Chemically Modified Apple Waste

100gm of raw Apple waste was treated with 200ml of conc. H_2SO_4 and left for 2 days and was washed till neutrality which produced high surface area and high degree of micro-porosity. Then it was dried below $80^{\circ}C$ for 6 hours in hot air oven and sieved to the particle size of $250\mu m$.

Preparation of different required chemical reagents and buffer solutions.

Determination λ_{max} and Calibration Curve

Absorbance Spectra and Calibration Curve for Chromium (VI)

Chromium solution of concentration 5mg/L of volumes 0, 0.5, 1, 1.5, 2, 2.5 and 3mL were taken in different 25 mL volumetric flasks and was acidified with 1mL of 5N H_2SO_4 solution in each volumetric flask. Then 1mL of 0.25%diphenylcarbazidecomplex(DPCI) solution was added to each volumetric flask and shaken well. The volume was made up to the mark by adding water. The absorption spectra of red-violet colored Cr(VI)-Diphenylcarbazide complex of all solutions were recorded by using WPA Linton Cambridge UK spectrophotometer type S104 No.385 against blank solution at λ_{max} .The absorption spectra and the calibration curve for the determination of chromium after completing it with diphenylcarbazide at λ_{max} 540nm are as shown in Fig. below.

RESULTS AND DISCUSSION

The sorption of Cr(VI), Fe(II) and Al(III) in aqueous solution was examined by optimizing various physiochemical parameters such as contact time, initial pH, initial adsorbate concentration.

Table 1: Determination of λ_{\max} for Spectrophotometric Determination of Cr(VI)

S. N.	Wavelength (nm)	Absorbance
1	490	0.1
2	500	0.12
3	510	0.16
4	520	0.18
5	530	0.22
6	540	0.28
7	550	0.22
8	560	0.2
9	570	0.18
10	580	0.14

Source: Author's lab work (2016)

Table 2: Determination of Calibration Curve for Spectrophotometric Determination of Cr(VI)

S. N.	Concentration (ppm)	Absorbance
1	0.1	0.04
2	0.2	0.08
3	0.3	0.12
4	0.4	0.16
5	0.5	0.24
6	0.6	0.28
7	0.7	0.3
8	0.8	0.33
9	0.9	0.36
10	1.0	0.4

Source: Author's lab work (2016)

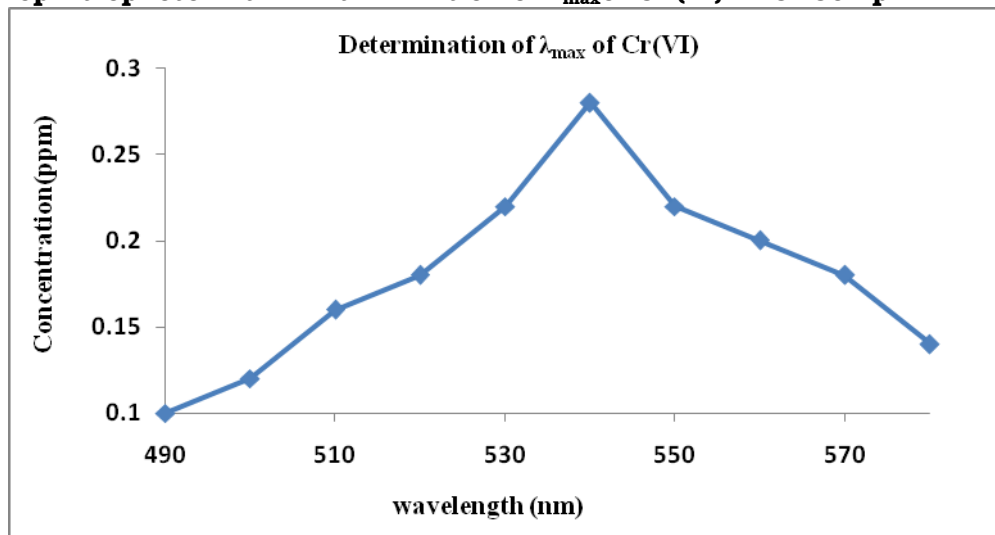
Spectrophotometric Determination of λ_{\max} of Cr (VI)-DPCI Complex

Figure. 1: A plot of absorbance versus wavelength for Cr(VI) at 0.6 ppm. The adsorption spectra of Cr(VI)-diphenylcarbazide complex showed that the maximum absorbance, at 540nm, as shown in fig.1, .The nature of spectra and λ_{\max} at 540nm matched with reported values.

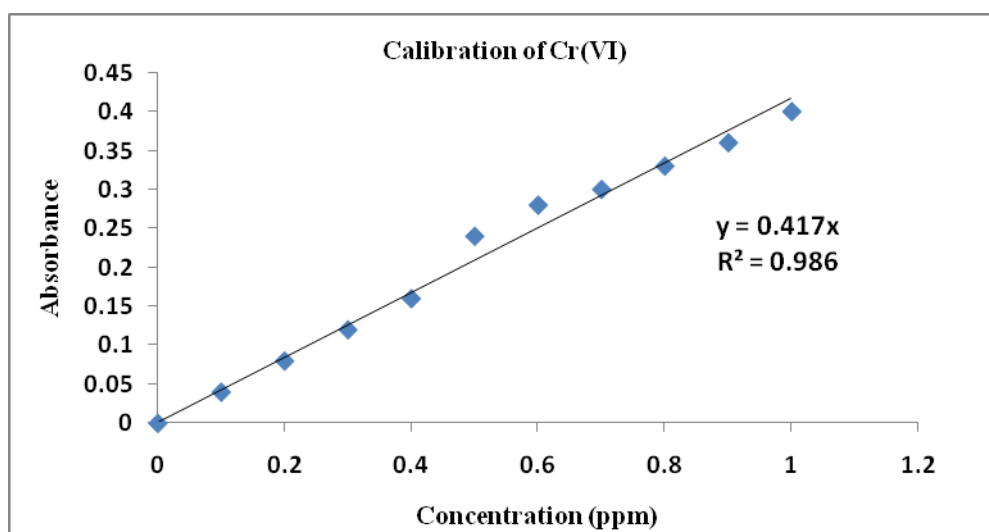


Fig. 2: A plot of absorbance versus concentration of Cr(VI) in ppm. The straight line passing through the origin indicates the conformity of Lambert-Beer's law, indicating a linear relationship between the absorbance of Cr (VI)-diphenylcarbazide complex and concentration of Cr(VI).

Effect of p^H

The pH of aqueous solutions is a key factor on adsorption process which is a function of hydrogen and hydroxyl ions concentrations. The P^H of solution has large impact on adsorption of ionic species because H^+ ions themselves are strong competing ions and partly p^H influences the chemical speciation of the adsorbate and functional groups available on the adsorbent surface.

To evaluate the impact of p^H on the adsorption process, experiments were carried out at different initial p^H . The effect of P^H on the sorption efficiencies of Cr(VI) on to the charred apple waste was studied.

Table 3: Effect of pH on the adsorption of Cr(VI) onto CAW

Total volume of sample = 25 ml

Amount of adsorbent = 25 mg

Concentration of the metal solution=20mg/l

Contact time = 24 hours

S.N	Initial pH	Equilibrium pH	Initial concentration, C_i (mg/l)	Equilibrium concentration, C_e (mg/l)	Amount adsorbed, q_t (mg/gm)	% Adsorption
1	1	1.1	18.76	1.97	16.79	87.17
2	2	2.3	19.70	3.95	15.75	78.30
3	3	3.2	19.25	8.39	10.86	54.70
4	4	4.4	18.76	10.86	7.90	42.10
5	5	5.2	19.70	12.83	6.87	34.00
6	6	6.1	19.25	16.29	2.96	15.38

Source: Author's lab work (2016)

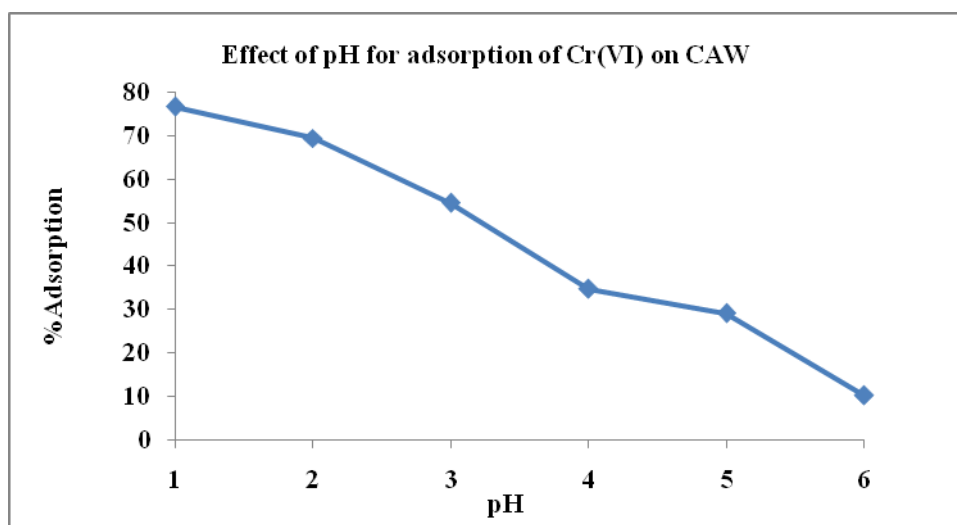


Fig. 3: Effect of pH on the adsorption of Cr(VI) onto CAW.

Removal of Cr(VI) decreases with the increase in p^H and maximum removal was found at pH1. This indicates that the adsorption of Cr(VI) is clearly depending on pH. It is obvious that pH determines the extent of the Cr(VI) removal as well as providing a favorable removal adsorbent surface charge for the adsorption to occur. At low pH, chromium exists as $HCrO_4$. The reason of maximum adsorption at low pH is due the favorable complexation with polyphenolic/polyhydroxy functional groups of the charred apple waste. From the batch pH studies it was found that the adsorption of Cr(VI) are found to be effective at pH 1. The reason for maximum sorption of Cr(VI) at low pH is due to the electrostatic attraction between negative ion and the positive surface functions of the charcoal indicating Cr(VI) is removed from the aqueous solution through anionic adsorption mechanism.

Effect of Contact Time

Initially metal ions were rapidly adsorbed with increasing time and subsequently it became slow until a steady state condition was attained.

The experimental study measuring the effect of contact time on the batch adsorption of 20 mg/l of Chromium with 25mg of adsorbent(CAW) is shown in figure and table.

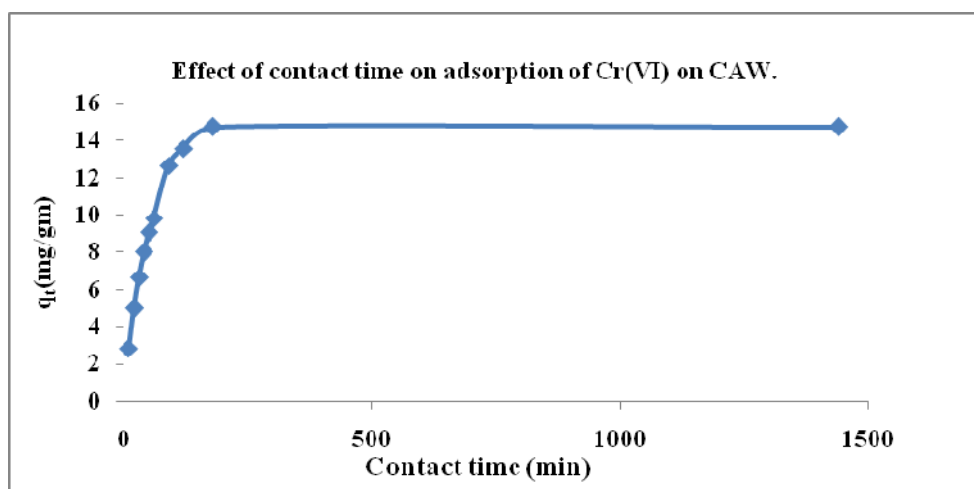


Table 4: Effect of contact time on the adsorption of Cr(VI) onto CAW

Initial metal concentration = 20 mg/l

Total volume of sample = 25 ml

Optimum pH = 1

Adsorbent dose = 25 mg

Time (min)	Initial Conc., C_i (mg/l)	Concentration at time, t (mg/l)	Amount Adsorbed, q_t (mg/g)	$q_e - q_t$ (mg/g)	t/q_t (min/mg/g)	$1/q_e - q_t$ (g/mg)	$\log(q_e - q_t)$	% Adsorption
10	19.25	16.4	2.85	11.9	3.5	0.08	1.07	14.8
20	19.25	14.25	5	9.75	4	0.1	0.98	25.97
30	19.25	12.59	6.66	8.09	4.5	0.12	0.9	34.59
40	19.25	11.25	8	6.75	5	0.148	0.82	41.55
50	19.25	10.16	9.09	5.66	5.5	0.176	0.75	47.22
60	19.25	9.42	9.83	4.92	6.1	0.2	0.69	51.06
90	19.25	6.58	12.67	2.08	7.1	0.48	0.31	65.81
120	19.25	5.67	13.58	1.17	8.83	0.85	0.068	70.54
180	19.25	4.13	(q_e)14.75	-	12.2	-	-	76.62

Source: Author's lab work (2016)

Fig.4: Effect of contact time on the adsorption of Cr(VI) onto CAW.

CONCLUSION

In the present work, the removal of Cr(VI), from easily available low cost adsorbents, apple waste were investigated. Likewise, Optimum adsorption capacity for the CAW were achieved at pH 1 for Cr(VI) on the adsorbent CAW. The equilibrium contact times for the sorption of Cr(VI) was found to be 180 minutes for CAW.

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A GUIDELINE TO RESEARCH PROPOSAL WRITING

Maya Kaderiya

INTRODUCTION

Background of the study

The research proposal is the presentation of an idea what the researcher wish to pursue and address for the proposed study as it needs to explain the logic behind the proposed study, rather than simply describe or summarize the study, and to do so in a way that even non- specialists will understand (Pant,2010). The propose of proposal is to explain and justify the proposed study to an audience of non- expert on the researcher's topic (Maxwell, 2005).It can be opined that in the proposal, the researcher will describe what should be done, how it will be done , what will be expected in the result. If the proposal is vague and weak it may lead the painful and often unsuccessful thesis writing exercise. As Loke, Spiduso, and Silverman (2000) have mentioned about the functions of research proposal (i) a means of communication from the researcher to those who will assess, approve and possibly fund the project, (ii) a plan for action to describe the scope, aims, step-by- step procedures and expected outcomes of the work, (iii) a contract that will form the basis of agreement between the parties involved, e.g. the researcher, supervisors, funders, institutions(e.g. university or college) and (iv) the signed agreement which cannot be substantially altered without the agreement of all the parties involved.

Background of the study must be clearly mentioned. Under this, the general introduction of subject matter and interest of researcher should be briefly described; the utility of proposed study is also mentioned in this topic section. And it may also reveal the relevancy of research to the society. Background of the problem should be given in terms of the following information:

- *Description of the topic in general and how researcher developed interest in it.*
- *Place the study within the larger context of the literature.*
- *Background information of the organization or issue to be studied.*
- *Lay the broad foundation for the problem that leads to the study.*
- *Relevance of the proposed study.*

Statement of the problem

The statement of the problem is the focal point of the research. Effective problem statements answer the question "why does this research need to be conducted?". If researcher fails to answer this question, then the statement will become vague and ambiguous. The problem statement is just one sentence, with several paragraphs of elaboration. The problems of certain areas are explained in the statement of problem. Likewise, variables and their associations are explained. For example, if the topic is on 'poverty in Nepal'. One can raise the question what are the causes of poverty in Nepal? Thus, in the statement of problem, research questions are raised and their answers are sought.

Objective

The objectives developed for research should be simple, specific clear, short and measurable. General objectives are also prepared to address the whole research but the objectives prepared for carrying out the research should be specific. Thus, such objectives will be always short and less. It may be two or three in number.

Rationale/significance of the study

Indicate that how the study will refine revise, or extend existing knowledge in the area under investigation. Such types of refinement, revision or extension may have either a substantive, theoretical or methodological significance. While implication it is also thought that how results of the study may affect scholarly research, theory and practice etc specifically:

- *This section creates a perspective for looking at the problem.*
- *It points out how the study relates to the larger issues and uses a persuasive rationale to justify the reason for the study. It makes the purpose worth pursuing.*
- *The significance of the study answers the following question:*
 - *Why is the study important?*
 - *To whom is it important?*
 - *What benefits will occur if the study is done?*

Limitation of the study

On the basis of Limitation of the study, the study area and sample size are determined. In this section, it is mentioned that how the problems occur and why it is not possible to select the interested study area and samples. Researcher will indicate the time constraints, man power and financial problem for carrying out the research.

LITERATURE REVIEW

Literature review is the process of studying the published literature which has been done by others in the field of related research, topic and knowledge. It is the critical summary of the published literature in the field of research. Literature review also indicates that one should summarize the broad content of the research article or study and indicates clearly any linkages with other studies in the field.

Scientific research must be based on past knowledge. The previous studies cannot be ignored because they provide the foundation to the present study and provide the researcher with a handy guide to a particular topic (Pant,2010). Thus, primary purpose of literature review are: to learn how others have defined and measured key concepts; to identify data sources that other researchers have used; to identify potential relationship between concepts; and to identify researchable hypotheses.

Further, it can be mentioned that in literature review, a theoretical or conceptual framework with the help of independent and dependent variables, a schematic diagram is presented which assists the researcher to complete his research and to reach to the findings.

RESEARCH METHODOLOGY

The following research methods are included for preparation of research proposal.

Research design

While preparing the research design it should be mentioned that what type of research is being carried out, Research design may be descriptive, explorative experimental development studies and historical etc. Thus, as

per the research design the proposed study should be explained described and analyzed.

Nature of data

Under the nature of data whether the data is qualitative or quantitative should be mentioned. Qualitative data follows the quality and characteristics of data while quantitative data includes the numerical value or quantity in the data, for example, male and female are qualitative data when it is tried to find what is the number of males and females become quantitative data.

Sources of data

Sources of data include the primary or secondary sources of data. Primary data are first hand data, collected by researcher at hand while secondary data are already collected and used for certain research work. Further secondary data are categorized into internal and external data. Internal data are found within the organization or any company whereas external data are obtained from books, library research report CBS, NPC offices and so on.

Population/universe and sampling

Universe means the total number of population or households existed in the study area. Due to time constraints, lack of manpower and sufficient financial support, it is quite difficult of take the information from the all population, in this situation, selecting some elements/units from universe to represent the population is known as sampling. Thus, sampling is a process which represents the large population. Hence it is said that small is the representation of large whole. Under the methods of sampling like probability sampling including simple random, systematic, stratified and cluster sampling or non probability sampling including purposive / judgment, convenience, quota and snowball sampling is determined for the process of sampling while sample size is based on its population/ universe.

Data collection technique

Under the data collection techniques, various types of tools like questionnaire, interview schedule, observation and field work study etc. are used.

Data analysis and presentation

Data analysis is the coding, editing classifying and tabulation of data. After these processes completed, descriptive and inferential statistical methods are used to analyze the data. Likewise presentation of data includes the display of various charts, line graphs, bar graphs and pie-charts etc. Explanation and interpretation of data is done logically with great precisions.

Organization of the study

The organization of the study follows with relevant chapters needed to the study report. Generally, it is found that any research report contains 5 chapters, but it can be modified on its purpose. The essential chapters are mentioned below with its format:

CHAPTER: 1 INTRODUCTION /BACKGROUND OF THE STUDY
CHAPTER: 2 LITERATURE REVIEW
CHAPTER: 3 RESEARCH METHODOLOGY
CHAPTER: 4 DATA PRESENTATION AND ANALYSIS
CHAPTER: 5 SUMMARY AND CONCLUSION
REFERENCES

CONCLUSION

Research proposal writing is an essential part for any types of project work whether it is an academic or a professional. It becomes the blue print for any types of research. Without research proposal writing researcher is misled and cannot pursue his or her research activity. Thus, it can be rightly said that research proposal is an action plan framework for investigation of any research problem and reach to its solution.

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EFFECT OF FIRMS' FUNDAMENTAL VARIABLES ON COMMON STOCK RETURN IN NEPAL

Pitambar Lamichhane*

ABSTRACT

This paper analyzes the firms' fundamental variables affecting common stock return for the period of 2005/06-2013/14 using descriptive and analytical research design. The common stock return is dependent variable and firms' fundamental variables such as market value of equity as size, book to market equity, earning yield, cash flow yield and dividend yield are considered as explanatory variables. The result of this study reveals the positive and significant effect of market value of equity and earning yield on common stock return. Further, this paper observes that book to market equity and cash flow yield of Nepalese firms are inversely related with stock returns. Finally, this concludes that market value of equity, book to market equity and earning yield have more explaining power of stock return of firms in Nepalese stock market.

Key Words: *Stock return, market value of equity, book to market equity, earning yield, cash flow yield and dividend yield.*

INTRODUCTION

Common stock returns and pricing of common stocks are immense concern in the finance literature. The stock return is one of the most important issues in modern finance. Markowitz (1952) developed the portfolio theory to create portfolios of individual investments to trade-off risk and return. Markowitz argued a single asset or portfolio of assets offers higher expected return with the same or lower risk, and lower risk with the same or higher expected return. Sharpe (1964), Lintner (1965) and Mossin(1966) introduced and accepted Capital Asset Pricing Model (CAPM). The CAPM predicts a positive relation between stock return and systematic risk (beta). The beta determines the expected return on a stock and it assumes that security markets are efficient. Ross (1976) formulated Arbitrage Pricing Theory (APT) and examined that expected return of an asset is affected by unidentified risk factors such as interest rate, inflation rate etc.

The prior empirical studies have documented the presence of persistent cross-sectional patterns in stock returns and attempts to identify firm characteristics which explain differences in common stock returns. Amongst these various firm characteristics book to market equity (BME) ratio, size (market value of equity), earning to price (EP) ratio, leverage,

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dividend yield and joint role of book to market equity, market equity (size), beta, earning to price, and leverage (Fama and French, 1992) in the cross-section of average stock returns have been analyzed.

Average returns on small (low market equity) stocks are too high given their beta estimates, and average returns on large stocks are too low. It is argued that positive relation between leverage and average return and leverage is associated with risk and expected return. Average returns on stocks are positively related to the ratio of a firm's book value of common equity to its market value of equity and earnings-price ratios to explain the cross section of average returns on stocks including size and market beta. Moreover, Davis, Fama, and French (2000) confirmed the controversial findings of firms with high ratios of book value of common equity to market value of common equity have higher returns than firms with low book to market equity ratios and they confirmed the strength of the multifactor model of Fama and French (1992, 1996), which uses the market portfolio and representing portfolios for factors related to market equity (size) and book to market equity to describe stock returns.

Thus, this study has tried to examine the relation between firm's fundamental variables such as market equity (firm size), book-to-market equity, earning yield, cash flow yield, dividend yield and stock returns of firms in Nepalese stock market. In Nepalese context, Pradhan (1993) revealed that larger stocks have higher price earnings ratio, higher book-to-market equity ratio, lower liquidity, lower profitability, and lower dividend. Similarly, Prasai (2010) observed a significant but unexpected positive relationship between size and stock return. Negative and statistically significant relationship between book-to-market equity ratio and returns, the explanatory power of earnings yield and cash flow is not observed. Therefore, this study focuses to deal with the relationship of market equity (firm size), book-to-market equity, earnings yield, cash flow yield, dividend yield and stock returns of firms in Nepalese stock market. This paper basically deals with issues of: (a) Is there any explanatory power of firm specific fundamental variables for stock returns? (b) What is the role of size and book to market equity in explaining stock returns? (c) Is there positive relation between earnings yield and stock return? (d) Does higher cash flow yield give higher stock return? (e) What kind of relationship exists between firms' fundamentals and stock returns? (f) Which firms' fundamental variables have most important role in explaining the stock return? (g) What is the joint effect of firms' fundamental variables in explaining stock return?

OBJECTIVE OF THE STUDY

The main objective of this study is to analyze the effect of firms' fundamental variables such as market equity (size), book-to-market equity, earnings yield, cash flow yield and dividend yield on common stock return in Nepalese stock market. The specific objectives of this paper are as follows:

- a. To analyze the relationship between the firms' fundamental variables and common stock return of firms in Nepalese stock market.
- b. To examine the effect of market value of equity, book-to-market equity, earning yield, cash flow yield and dividend yield in explaining the common stock return of firms in Nepalese stock market.

The remaining part of this paper has been divided into four sections. Section two is for brief literature review of related studies. Section three deals with research methodology. Section four covers data analysis and findings. Finally, section five concludes the study with findings and suggestions for future research.

REVIEW OF RELATED STUDIES

There exists a positive and significant relationship between dividend yield and stock returns (Brennan, 1970; Litzenberger, & Ramaswamy, 1979). The book equity to market equity (BME) ratio implies value stock i. e, companies which may have been poor performer in the past while low book to market equity characterizes growth stocks that are supposed to have done well historically (Stattman, 1980). Banz (1981) examined relation between average returns and market values as portfolios sorted by market value and estimated betas and concluded that CAPM is mis-specified, but fails to give an economic explanation why size is a factor in stock returns or whether it is just a proxy for a risk factor not captured in securities' betas. Roll (1981) argued that risk measures are biased downward due to autocorrelation in the returns of small firms which are infrequently traded. The size effect is distinct from earning to price effect and small firms tend to have higher returns, even after controlling for earning to price (Basu, 1983). High ratios of book to market equity have significantly higher returns than stocks with low book to market equity and further, the author argued that high ratios of book value to market value of common equity have significantly higher returns than stocks with low book-to-market equity (Rosenberg, Reid, & Lanstein, 1985). Bhandari (1988) proposed to use a firm's debt-to-common equity ratio to explain the expected common stock returns and argued that the average common stock returns are positively related to the ratio of debt to equity, after controlling for both beta and firm size.

Fama and French (1992) revealed the book to market equity consistently has the greatest power for explaining stock returns, a stock's beta does not have significant explanatory power and combination of the book to market equity and market value of equity absorbs the roles of leverage and earning to price ratio in explaining stock returns. In a subsequent study, they argued that market equity and book to market equity are proxies for firm risk. Their economic rationale for this finding is that companies that are smaller or have a relatively high book to market equity and to have weaker economic and financial performance than companies with opposite characteristics. Hence, higher returns on the stocks of such companies are

essentially compensation for the assumption of greater risk. High book to market equity stocks are less profitable than low book to market equity stocks. At the opposite side, low book to market equity is typical of firms with high average returns on capital whereas high book to market equity is typical of firms that are relatively distressed. Controlling for book to market equity, small stocks seem to have lower earnings on capital than that of big stocks. However, book to market equity is a stronger indicator of profitability than size (Fama and French, 1996).

Pradhan (2003) has examined the relation of dividend yield, capital gain yield, and total yield related to earnings yield, size, book to market equity ratio and cash flow yield and revealed that larger stocks have larger price earnings ratios, larger book to market value, lower liquidity, lower profitability and smaller dividend. The author concluded that earnings yield and size have significant positive impact on dividend yield and total yield and positive relationship exists among earnings yield, book to market equity ratio and cash flow yield.

Prasai (2010) stated a significant and positive impact of size on stock return. The book to market equity ratio and returns are negatively and significantly related. Earnings yield and cash flow yield do not have explanatory power to explain stock return. Moreover, it contradicts with CAPM in Nepalese stock market which is a positive and linear relationship between beta and stock return.

The most of the prior studies have been administered in developed capital market to examine the relationship between firms' fundamental variables and stock returns. In this regard, limited and no depth studies have been carried out in developing capital market like Nepal. The limited number of listed firms, few investors, lack of professionalism, small volume of transactions, lacking of relevant information are Nepalese stock market's characteristics because Nepalese stock market is still in early phase of development of stock market. Thus, it is essential to examine the relationship between firms' fundamental variables and common stock return to explain the effect of firms' fundamental variables on common stock returns of firms in Nepalese stock market.

RESEARCH METHODOLOGY

Research Design

The study has used descriptive and analytical research designs to explain the effect of various firms' fundamental variables on common stock return. This paper has applied descriptive research design to explain stock return of 35 firms consisting 265 observations during fiscal year 2005/06 through 2013/14 with respect to firms' fundamental variables such as market equity, book-to-market equity, earning yield, cash flow yield and dividend yield. The analytical research design is applied to determine and analyze the effects of market equity, book-to-market equity, earning yield, cash flow

yield and dividend yield on common stock return of firms in Nepalese stock market. This study has employed univariate, bi-variate and multi-variate regression models to examine the impact of explanatory (firms' fundamental) variables on common stock return of firms in Nepalese stock market.

Nature and Sources of Data

This study has employed secondary sources of data. For the secondary data set, necessary information are collected from periodical reports and statements published by Nepal Stock Exchange Limited (NEPSE) and financial statements of respective firms covering period of fiscal year 2005/06 to 2013/14.

Population and Sample

In this paper, all the firms listed in Nepal Stock Exchange till fiscal year 2013/14 are considered as population. Out of total two hundred thirty seven firms listed in Nepal Stock Exchange Limited by the end of FY 2013/14, only thirty five firms have been selected as sample. Total two hundred and sixty five observations are used to analyze firms' fundamental variables affecting common stock return of firms in Nepalese stock market.

Analysis Tools

This paper has applied SPSS (version 20) program to process and analyze data. The study has used descriptive statistics, and regression analysis along with statistical test of significance such as t-test, F-test, Adjusted R², Durbin-Watson (DW) test of auto-correlation and Variance Inflationary Factor (VIF) test of multicollinearity. The ordinary least square regression models have been employed to analyze the effect of firms' fundamental variables on common stock return of firms in Nepalese stock market.

Variables

- a. Stock return:** In this paper, common stock return (R_{it}) of Nepalese firms is considered as independent variable. The common stock return (R_{it}) is percentage of annual return due to percentage change in market price of stock. It is a measure of difference between market price of beginning and ending of the year divided by beginning price of the stock. The prior theoretical and empirical studies have observed several factors that affect common stock return of firms. In this study, market value of equity, book-to-market equity, earning yield, cash flow yield and dividend yield are considered as independent variables to explain their effect on common stock return of firms in Nepalese stock market. In this paper, common stock return is calculated using the equation(1).

$$\text{Stock Return } (R_{it}) = \frac{P_{it} - P_{i(t-1)}}{P_{i(t-1)}} \quad \dots \quad (1)$$

Where, P_{it} is price of stock at the end of year t-1

- b. Market equity:** The market value of equity is the market capitalization of stock. Equity Market capitalization is defined as number of share outstanding times closing price of the stock. In this paper, natural logarithm of market equity or capitalization, (ln ME) is used as a proxy for firm size, in consideration of size effect. Equity Market capitalization of firm i in year t has been determined using equation (2).

$$ME_{i,t} = P_{i,t} \times NSO_{i,t} \quad \dots \quad (2)$$

Where,

$ME_{i,t}$ is market value of equity, $P_{i,t}$ is the closing price of stock and $NSO_{i,t}$ is the number of shares outstanding for firm i^{th} at the end of year t.

- c. Book-to-market equity:** Book to market Equity (BME) is the ratio of book value of equity to the market value of equity. BME is used in consideration of book to market effect of relative distress factor as referred by Fama and French(1996). It has been computed using equation (3).

$$BME_{it} = \frac{BE_{it}}{ME_{it}} \quad \dots \quad (3)$$

Where,

$BME_{i,t}$ is the ratio of book equity to market equity, $BE_{i,t}$ is book value of equity and $ME_{i,t}$ is the market value of equity of i^{th} firm at the end of year t.

- d. Earning yield:** The earning is defined as the ratio of earnings per share at the end of year t to the corresponding market price per share at the end of year. It has been calculated using the equation(4).

$$EY_{it} = \frac{EPS_{it}}{MPS_{it}} \quad \dots \quad (4)$$

Where,

$EY_{i,t}$ is the earnings yield, $EPS_{i,t}$ is the earnings per share, and $MPS_{i,t}$ is the market price per share of stock for the i^{th} firm at the end of year.

- e. Cash flow yield:** Cash flow yield (CFY) is defined as cash flow divided by market value of equity. Cash flow yield is taken as net income available to common stockholders plus non-cash expenses i.e. depreciation and amortization. Cash flow yield is simply equals to the ratio of earnings plus depreciation to market capitalization. The cash flow yield that is used for firm i at a given year t is calculated using equation (5).

$$CFY_{i,t} = \frac{CF_{i,t-1}}{ME_{i,t-1}} \quad \dots \quad (5)$$

Where,

$CF_{i,t-1}$ is the cash flow and $ME_{i,t-1}$ is market value of equity of firm i^{th} at the end of year t-1.

f. Dividend yield: Dividends act as proxy for the future profitability. Dividend yield is measured as gross dividend in year t divided by the market value of equity in year $t-1$. The dividend yield that is used for firm i at a given year t is calculated using equation (6).

$$DY_{i,t} = \frac{DPS_{it}}{MPS_{t-1}} \quad \dots \quad (6)$$

Where,

$DY_{i,t}$ is dividend yield, DPS_{it} is dividend per share of firm i^{th} at the end of year t and MPS_{t-1} is the market price per share of firm i^{th} at the end of year $t-1$.

The Model

The study has used simple linear regression model to establish the relationship between stock returns and each of the firm specific fundamental variables. In order to analyze the relationship between cross-sectional variation in common stock returns and the fundamental variables-market value of equity, book-to-market-equity, earning yield, cash flow yield, and dividend yield multiple; regression models has been used. The regression models of this study are as follows:

$$R_{it} = \beta_0 + \beta_1 \ln ME_{it} + \beta_2 BME_{it} + \beta_3 EY_{it} + \beta_4 CFY_{it} + \beta_5 DY_{it} + e_{it} \quad \dots \quad (7)$$

Where,

- R_{it} = returns on common stock of firm 'i' at period 't'.
- $\ln ME_{it}$ = natural logarithm of market equity or capitalization (size) at period 't'.
- BME_{it} = book-to-market equity ratio at period 't'.
- EY_{it} = earnings per share to price per share i.e. earnings yield at period 't'.
- CFY_{it} = cash flow yield at period 't'.
- DY_{it} = dividend yield at period 't'.
- β_0 = Coefficients of constant or intercept value
- $\beta_1, \beta_2 \dots \beta_5$ = Coefficients of explanatory variables
- e_{it} = unexplained residual error terms

Data Analysis and Results

This section of the paper attempts to analyze data associated with factors (firms' fundamental variables) affecting common stock return of firms in Nepalese stock market. This paper deals with firms' fundamental variables and their effect on stock return to observe and analyze relationship among these variables. The various financial and statistical tools such as descriptive statistics, and regression analysis under analytical research design are used to analyze the effect of various firms' fundamental variables on common stock returns of firms in Nepalese stock market.

Descriptive Statistics

This paper has employed descriptive statistics to describe the factors affecting net stock return during study period. Table 1 presents summary statistics of variables used in this study. It shows, minimum, maximum, mean values, and standard deviation of stock return and its explanatory variables.

Table 1
Descriptive Statistics of Variables

S. N.	Variables	Minimum	Maximum	Mean	Standard Deviation
1	R_{it} (%)	-0.842	4.781	0.110	0.532
2	lnME (Rs In million)	16.121	25.382	21.241	1.851
3	BME (times)	0.733	57.253	1.242	3.743
4	EY (%)	-1.321	47.161	0.213	2.360
5	CFY (%)	-0.523	2.342	0.191	0.243
6	DY (%)	0.000	0.683	0.073	0.121

Source: Nepal Stock Exchange Limited, 2005/06-2013/14

Table 1 shows the descriptive statistics for all variables. Table 1 reveals that all fundamental variables (lnME, BME, EY, CFY, and DY) along with return have positive mean values. The mean values of stock returns, lnME, BME, EY, CFY, and DY are 0.110, 21.241, 1.242, 0.213, 0.191 and 0.073 respectively and the standard deviation of these variables are 0.532, 1.851, 3.743, 2.360, 0.243 and 0.121 respectively. The result implies that stock return of firms in Nepalese stock market is very low. Table 1 also presents minimum and maximum values of stock return and explanatory variables for the study period.

Regression Analysis

In this paper, regression analysis models have been used to explain relationship between common stock return and explanatory variables. Table 2 presents regression results of univariate, bivariate and multivariate regression models under previous specified equations to explain the relationship between various firms' fundamental variables and stock return to analyze effect of their (fundamental variables) impact on common stock return of firms in Nepalese stock market.

Table 2

Regression Relationship of Stock Return with Explanatory Variables

$$\text{Model: } R_{it} = \beta_0 + \beta_1 \ln ME_{it} + \beta_2 BME_{it} + \beta_3 EY_{it} + \beta_4 CFY_{it} + \beta_5 DY_{it} + e_{it}$$

The figures in the parentheses are t-value and asterisk sign indicates that result is significant level. ** Indicates statistical significance at 1 percent level * Indicates statistical significance at 5 percent level. Also reported are the F-statistics and Adjusted R².

Models	Constant	lnME	BME	EY	CFY	DY	F	Adj.R ²
1	-0.591 (-1.687)	0.058 (2.571*)	-	-	-	-	7.973*	0.151
2	0.532 (5.874)	-	-0.370 (-5.754**)	-	-	-	19.657**	0.211
3	0.463 (6.115)	-	-	0.269 (2.857**)	-	-	14.125**	0.116
4	0.401 (7.046)	-	-	-	-0.338 (-3.411*)	-	9.431**	0.105
5	0.137 (3.596)	-	-	-	-	0.113 (0.613)	2.283	0.082
6	0.791 (1.582)	0.157 (4.618**)	-0.365 (-3.743**)	-	-	-	19.513**	0.234
7	-0.319 (-1.972)	0.020 (1.836**)	-	0.031 (1.623)	-	-	6.517*	0.169
8	-0.216 (-1.645)	0.045 (1.741*)	-0.083 (-1.784**)	0.053 (1.446**)	-	-	9.142**	0.196
9	0.973 (2.326)	0.045 (0.845*)	-0.524 (-2.961**)	0.413 (2.386*)	-0.292 (-1.614)	-	11.374**	0.211
10	1.982 (3.173)	0.584 (2.185**)	-0.426 (-3.186**)	0.514 (1.526**)	-0.197 (-1.525)	0.141 (0.579)	23.925**	0.287

Source: Author's own calculation based on data of Nepal Stock Exchange Limited, 2005/06-2013/14

The first regression model in Table 2 shows negative relationship between stock return and size of market value of equity (lnME) of the firms. The regression result indicates that the relationship between market value of equity(size) and stock return of firms seems positive and statistically significant at 5 percent level. This result contradicts with findings of Chan, Hamao and Lakonishok (1991), Fama and French (1992) and Pradhan (2003) that size (lnME) helps explain the cross section of average stock returns and found negative relation with stock return. The result of this study indicates that market equity has explanatory power to predict stock returns of firms in Nepalese stock market.

The second model exhibited in Table 2 depicts relationship between stock return and book to market of the firms. The second model of regression analysis shows negative relationship of book to market equity with stock return. In Nepalese context, result of regression analysis of Table 2 indicates that book to market equity has statistically significant impact on stock return at 1 percent level of significant. The result of the study contradict with findings of Fama and French (1992) and Davis (1994) who found that book-to-market equity has positive influence on stock returns. The result implies that stock return decreases with increment in book to market equity of the firms. Similarly, the regression analysis of third model shown in Table 2 indicates that earning yield is positively and significantly related with stock return at 1 percent level of significance. The regression result of model 3 reveals that earning yield has strong explanatory power to predict stock return of firms in Nepalese stock market.

The fourth model of Table 2 shows the relationship between stock return and cash flow yield and indicates that cash flow yield has a negative and statistically significant impact on stock return at 5 percent level of significance. The result implies that cash flow yield has explanatory power to explain and predict stock return of firms in Nepalese stock market. The result of this study contradicts with the findings of Chan, Hamao and Lakonishok(1991) and Pradhan (2003) where both studies observed positive effect on stock returns. Therefore, the study concludes that large cash flow yields of firms are perceived as negative influence to the stock return. The adjusted R² of 0.105 implies that cash flow yield has 10.5 percent explaining power of stock return. The regression result of model 5 indicates that the relationship between dividend yield and stock return is positive but statistically insignificant. This result implies that dividend yield has no impact on stock return of firms in Nepalese stock market.

Similarly, bivariate regression models 6 and 7 exhibited in Table 2 shown the relationship between different explanatory variables and stock return of Nepalese firms. The result of bivariate models shows that market value of equity and earning yields are positively related with stock return but only market value of equity has statistically significant impact on stock return at 1 percent level of significance but earning yield has no significant

impact. The result of bivariate regression model shows that book to market equity has negative impact on stock return of firms in Nepalese stock market.

Further, Table 2 presents various multivariate regression models that show the combined impact of firm related explanatory variables (firms' fundamental variables) on common stock return. The models 8, 9, and 10 of Table 2 indicate that market to equity and earning yields are positively related whereas book to market equity and cash flow yields are negatively related with stock return of firms in Nepalese stock market. Furthermore, Table 2 presents the multivariate regression model including all the firm-specific fundamental variables and result of this model shows that market value of equity (lnME), earning yield (EY) and dividend yield (DY) are positively related with stock return but only in ME and EY have the strong explanatory power of stock return at 1 percent level of significance. Further, the result reveals that book to market equity (BME) and cash flow yield (CFY) are negatively related but only book to market equity has statistically significant impact on stock return of firms in Nepalese stock market. The coefficient of determinants (Adj. R²) is 0.287. Hence, the model is statistically significant and predicting power of model is 28.7 percent.

The F-values of the models 1 through 10 excluding model 5 are statistically significant which indicates that all the regression models (except model 5) are statistically significant. The computed values of DW for the entire models specifications of common stock return fall in between dU and 4-dU. Therefore, there is no evidence of serious problem of autocorrelation. With regards to multicollinearity, VIF of explanatory variables across all the model specifications of stock return are significantly lower than ten. Thus, there is no evidence of multicollinearity in the regression models of stock return of firms in Nepalese stock market (Computed values of DW statistics and VIF are not presented in Table 2 because of limited space).

CONCLUSION

This paper examined the effect of firms' fundamental variable (market value of equity i.e. firm size, book-to-market equity, earnings yield, cash flow yield and dividend yield) on common stock return of firms in the context of Nepalese stock market. In this study, the market equity (firm size), book-to-market equity, earning yield, cash flow yield and dividend yield have been

considered as explanatory variables to explain the common stock returns of firms in Nepalese stock market using descriptive and analytical research design for the period of fiscal year 2005/06 to 2013/14. The study reveals that the market equity has positive impact on stock return. However, book-to-market equity has inverse impact on stock return which indicates opposite relation with prior expectation. The book-to-market equity is consistently negative across all regression analysis which implies that there is negative relationship between book to market equity and common stock returns. Similarly, this study concludes that earning yield has also explanatory power for explaining stock return of firms in Nepalese stock market. Furthermore, this study reveals negative relationship between cash flow yield and stock return. Further, this paper observes positive relationship between dividend yield and stock return but dividend yield has no strong explanatory power of stock return of firms in Nepalese stock market. The finding of this paper concludes that market equity and earning yields have positive and strong explanatory power but dividend yield has no explanatory power whereas book to market equity and cash flow yield have negative impact on stock return of firms in Nepalese stock market.

Suggestion for future research: This study has used annual observation of common stock returns but results may differ if stock return is determined based on daily or weekly or monthly or quarterly observations. Therefore, future studies should be directed to analyze stock return based on daily or weekly or monthly or quarterly observations. This paper has considered only few firms' fundamental variables such as market value of equity, book to market equity, earning yield, cash flow yield and dividend yield of the firms. Hence, further study should be inclusion of some other variables such as stock beta, leverage, and macro-economic variables which may provide better insight into factors affecting common stock returns of firms in Nepalese stock market. This paper has analyzed firms' fundamental variables and stock return as aggregate analysis of various industries. Thus, further studies should be made to observe the effect of firm specific variables on stock return as industry wise with covering more periods and observations.

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ORGANIZATIONS WORKING ON HIV/AIDS IN RUPANDEHI DISTRICT

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ABSTRACT

HIV/AIDS is being major health problem in the world so as to Nepal. With this view, a study has been attempted to describe organizations working on HIV/AIDS in Rupandehi district. The study was conducted in descriptive research design and different secondary data were collected through different sources. It was found that different persons and organizations are actively working to control and reduce of its harm. Different 17 types and their more than 250 branches are involved in these fields in Nepal and there are 25 different organizations working in Rupandehi district. Most of the organizations are serving without any fee, while most of the organizations are working in town areas. Decentralization is necessary to provide better services where many people may not be public because of lack of awareness and hesitation.

Key words: HIV/AIDS, FPA, FPAN, MARPs, PLWHA, AAN etc.

BACKGROUND OF THE STUDY

Human immune deficiency virus infection / acquired immune deficiency syndrome (HIV/AIDS) is a disease of the human immune system caused by infection with human immunodeficiency virus (HIV). During the initial infection, a person may experience a brief period of influenza-like illness. This is typically followed by a prolonged periods without symptoms. As the illness progresses, it interferes more and more with the immune system, making the person much more likely to get infections, including opportunistic infections and tumors that do not usually affect people who have working immune systems.

HIV is transmitted primarily via unprotected sexual intercourse (including anal and even oral sex), contaminated blood transfusions, hypodermic needles, and from mother to child during pregnancy, delivery, or breastfeeding. Some bodily fluids, such as saliva and tears, do not transmit HIV. Prevention of HIV infection, primarily through safe sex and needle-exchange programs, is a key strategy to control the spread of the disease. There is no cure or vaccine; however, antiretroviral treatment can slow the course of the disease and

may lead to a near-normal life expectancy. While antiretroviral treatment reduces the risk of death and complications from the disease, these medications are expensive and may be associated with side effects.

Genetic research indicates that HIV originated in west-central Africa during the early twentieth century. AIDS was first recognized by the Centers for Disease Control and Prevention (CDC) in 1981 and its cause—HIV infection—was identified in the early part of the decade. Since its discovery, AIDS has caused nearly 30 million deaths in 2009 and approximately 34 million people are living with HIV globally as reported in 2010. AIDS is considered a pandemic—a disease outbreak which is present over a large area and is actively spreading. HIV/AIDS had a great impact on society, both as an illness and as a source of discrimination. The disease also has significant economic impacts. There are many misconceptions about HIV/AIDS such as the belief that it can be transmitted by casual non-sexual contact. The disease has also become subject to many controversies involving religion. (Wikipedia, n.d.)

According to Cumulative HIV and AIDS situation of Nepal by Ministry of Health and Population, National Centre for AIDS and STD Control in Nepal, there are 13718 Male, 7817 female and 16 Third gender are infected as of Mangsir, 2069 (NCASC,2069).

World Bank says that the first case of AIDS in Nepal was reported in 1988. As till December 15, 2011, mainly 19,118 cases of HIV infection were officially reported; however, given the limitations of Nepal's public health surveillance system, the actual number of infections is thought to be higher. There are approximately 50,200 people living with HIV as of 2011 and that around 60 percent of those infected are unaware of their sera-status.

In Rupandehi, out of 71 known HIV positives, 13 people living with HIV/AIDS (PLWHA) died in 2005 alone, many more may have died without knowing so far. Update on August 9, 2009. (Asha Jyoti sahayog Samaj, 2009) and more than 900 people recognized living with HIV/AIDS in Rupandehi having different stages, occupations, sexes and situations as reported by NUMANA, Butwal. By these facts HIV/AIDS is being strong challenges and problems in the world so as in Nepal and Rupandehi. To reduce these problems different persons, organizations as well as nations

are working in this field. Actually what are the organizations working to HIV/AIDS in Nepal as well as in Rupandehi District? Regarding this, the present paper seeks the answer about it.

OBJECTIVE

The major objective of present paper is to analyze the organizations working on HIV/AIDS.

METHODOLOGY

The descriptive design was adopted for the study. The qualitative data are taken from different secondary sources such as internet, documents etc. No other advanced statistical methods have been applied except descriptive approach to analyze the data.

DISCUSSION

To get different information and facts, it was searched in different web sites and visited some organizations. The facts and information found during the study is discussed below:

Ten Facts of WHO on HIV/AIDS

1. HIV (human immunodeficiency virus) infects cells of the immune system. Infection results in the progressive deterioration of the immune system, breaking down the body's ability to fend off some infections and other diseases. AIDS (Acquired immune deficiency syndrome) refers to the most advanced stages of HIV infection, defined by the occurrence of any of more than 20 opportunistic infections or related cancers.

2. HIV can be transmitted in several ways HIV can be transmitted through:
Unprotected sexual intercourse (vaginal or anal) or oral sex with an infected person;

Transfusions of contaminated blood;

The sharing of contaminated needles, syringes or other sharp instruments;

Transmission between a mother and her baby during pregnancy, childbirth and breastfeeding.

3. 34 million People live with HIV worldwide

The vast majority are in low- and middle-income countries. An estimated 2.5 million people were newly infected with the virus in 2011.

4. HIV is the world's leading infectious killer About 25 million people have died to date. An estimated 1.7 million people died of HIV/AIDS in 2011.

5. Combination antiretroviral therapies (ART) prevent the HIV virus from multiplying in the body. If the reproduction of the HIV virus stops, then the body's immune cells are able to live longer and provide the body with protection from infections. If the HIV positive partner in a couple is on ART, the likelihood of sexual transmission to the HIV-negative partner decreases dramatically.

6. Over 8 million HIV-positive people had access to ART in low- and middle-income countries at the end of 2011. Overall, the coverage of ART in low- and middle-income countries continued to increase and was 54% of the close to 15 million people eligible for treatment.

7. An estimated 3.34 million children are living with HIV According to 2011 figures most of the children live in sub-Saharan Africa and were infected by their HIV-positive mothers during pregnancy, childbirth or breastfeeding. Over 900 children become newly infected with HIV each day.

8. Mother-to-child-transmission of HIV is almost entirely avoidable Access to preventive interventions remains limited in most low- and middle-income countries. But progress has been made. In 2011, 57% of pregnant women living with HIV received the most effective drug regimens (as recommended by WHO) to prevent mother-to-child transmission of the virus.

9. HIV is the strongest risk factor for developing active TB disease In 2011, approximately 430 000 deaths from tuberculosis occurred among people living with HIV. That is one quarter of the estimated 1.7 million deaths from HIV in that year. The majority of people living with both HIV and TB reside in sub-Saharan Africa (about 79% of cases worldwide).

10. There are several ways to prevent HIV transmission

Key ways to prevent HIV transmission:

Practice safe sexual behaviors such as using condoms;

Get tested and treated for sexually transmitted infections, including HIV;

Avoid injecting drugs, or if you do, always use new and disposable needles and syringes;

Ensure that any blood or blood products that you might need are tested for HIV.

(WHO, 2013)

Organizations Working on HIV/AIDS in National Wise

In Nepal, there are different organizations working to control HIV/AIDS, mostly two (Governmental, Non-Governmental) types of organization actively working in these fields.

In this context here are given different organization working in HIV/AIDS from different sources According to World Bank the following organizations are working in HIV/AIDS in Nepalese context:

Government and Institutional Framework

In 1988, the Government of Nepal launched the first National AIDS Prevention and Control Program and in 1992 established a multi-sector National AIDS Coordinating Committee (NACC) chaired by the Minister of Health. In 1995, a national policy was formulated, emphasizing the importance of multi-sectoral involvement, decentralized implementation, and partnership between the public, and the private sectors (including NGOs).

In 2002, a National AIDS Council (NAC) chaired by the Prime Minister was established to raise the profile of HIV/AIDS. The NACC reports to the NAC. The NAC was meant to set overall policy, lead national level advocacy, and provide overall guidance and direction to the program. The NACC, on the other hand, was expected to lead the multi-sector response, and to coordinate active participation of all sectors in the fight against HIV. However, both the NAC and the NACC have essentially been non-functional. At the district level, District Development Committees are charged with implementing and monitoring HIV projects according to national strategies and guidelines.

The main governmental agency responsible for HIV/AIDS and STDs is the National Center for AIDS and STD Control (NACSC) under the Ministry of Health and Population. The NCASC reviewed the previous National Strategy on HIV/AIDS (2006-2011) and developed the National HIV/AIDS Strategy 2011-2016 which highlights prevention as a key strategic direction. The goal of this strategy is to attain universal access to HIV prevention, treatment, care and support with targets to 1) reduce new HIV infections by 50%, 2) reduce AIDS related deaths by 25% and 3) reduce new HIV infections in children by 90% by 2016. Moreover, the National AIDS Policy (1995) has been revised to inform the new “National Policy on HIV and STI, 2011”. The new policy highlights the roles and linkages of National AIDS Council, HIV/AIDS and STI Control Board (HSCB) and the NCASC. The HSCB was established in 2007 to enhance and expand the response to HIV and AIDS through, among other things, multi-sectoral coordination. NCASC will continue to serve as the lead technical agency for surveillance, policy and technical guidance, capacity building of the health sector, and monitoring and evaluation of the health sector response. It will also assist with the mainstreaming of HIV and STI related activities within the sectoral programs of the MoHP (Ministry of Health and Population) and other line ministries.

The NCASC is in the process of developing a National M & E framework for ensuring harmonization of national and global indicators. It has established an institutional arrangement to collect, collate and disseminate information in order to support decision making, planning and implementation of strategic activities.

Non-Governmental and Community Based Organizations (NGOs & CBOs)

There are currently almost 100 NGOs working in the area of HIV/AIDS in Nepal and numerous private and voluntary organizations implement activities funded by donors. As a result, the relationship and communications between the government and the NGO community, as well as among NGOs themselves, are not coherent.

Donors

A number of multi-lateral and bilateral organizations support HIV/AIDS prevention, care and support and treatment initiatives in Nepal, including interventions for vulnerable groups; behavioral change communications;

condom promotion; STD control; testing and counseling; surveillance; and operational research. Financing for HIV/AIDS services has been provided by, among others, Family Health International (FHI), USAID and the Global Fund, and has been mostly managed by UNDP and FHI. Presently, the pooled funders in the SWA (Sector-wide approach) have financed for preventive services for the targeted populations.

World Bank Response

The World Bank has provided the Government of Nepal with technical assistance in a variety of areas pertaining to HIV and AIDS. This includes updating the National Strategy, and integrating HIV prevention into the country's National Health Sector Program. It also covers issues related to STI treatment, blood safety, HIV surveillance, voluntary counseling and testing for HIV, and care and support of people living with HIV and AIDS.

The Bank has committed financial support to the Government of Nepal to respond to HIV and AIDS through the Second HNP and HIV/AIDS Project (US\$129.15 million), its overall support to the second phase of the Nepal Health Sector Program (2010-2015).

The National Center for AIDS and STD Control (NCASC) is responsible for the implementation of the response to the HIV epidemic through MOHP's network of health facilities and health workers, and for the contracting out of NGO-delivered services to reach Most-at Risk populations (MARPs) with effective prevention, diagnosis and treatment services in their own communities. The HIV/AIDS and STI Control Board (HSCB) is responsible for the coordination of the overall national multi-sector response, policy formulation, and strategic planning. (The World Bank, 2012). It can be analyzed that government and institutional framework non-governmental and community based organizations (NGOs & CBOs), different donors as well as World Bank are actively working to control HIV/AIDS in Nepal.

AAN (AIDS ALLIANCE NEPAL)

It is one of the national community based non-profit organizations representing people living with HIV/AIDS through a network of individuals and groups which provide the services to people living with HIV/AIDS (PLWHA). AAN was formed in March 2005 in response to an emerging need

for PLWHA (especially women and children living with HIV) to be given a voice. These organizations are listed in 17 types with their different branches in HIV/AIDS in Naples context, which are given below:

- Family Planning Association of Nepal- FPAN (28)
- Treatment Center (23)
- Organization working for BCI/Harm reduction (9)
- Rehabilitation Center (9)
- Incomes generating service/Skill Development (3)
- Nursing care and Pain Management (about 83)
- Spiritual Care (4)
- PLWHA self support group (7)
- Care and Support/ Palliative Care (9)
- Mental Health (6)
- DOTS/TB Treatments (31)
- STI treatment and Referral (4)
- HIV/AIDS Related Website (2)
- Medical Treatment (7)
- ARV Therapy (10)
- HIV/AIDS testing (5)
- HIV/AIDS Counseling (Individual and Family) (8)
- Above data shown that, there are 17 types and their about 250 different organizations are working on HIV/AIDS field in Nepal.

Organizations Working on HIV/AIDS in Rupandehi

Namuna Integrated Development Council, NAMUNA, Butwal is making the list as a Referral directory of organizations working in HIV/AIDS field on Rupandehi for their official purpose. The researcher visited NAMUNA, Butwal and taken data, which are listed below:

1. Namuna Integrated Development Council, NAMUNA, Butwal

Contact person: Smit Rajbhandari.

Contact No: 071-541259

Email Address:

Address/Location: Butwal 11, Ittavatti

Activities/Programs: Major interventions Areas: - HIV/AIDS and
Drugs education- Reproductive Health- Safe Motherhood- Peace

Building- Women and Youth: Pillars for Sustainable Peace-
Accompaniment program with families of missing person.
Service day/hour: Sunday to Friday 10am-5pm
Service Fee: free

2. Namuna Integrated Development Council, NAMUNA, Bhairahawa

Contact person: Ms. Gyanu Paudyal
Contact No: 9857022135
Email Address: gyanupd@wlink.com.np
Address/Location: Siddharthanagar Municipality ward no 8, Bank Colony, Rupandehi(Near the Butwal Buspark)
Activities/Programs: Major interventions Areas: - HIV/AIDS and Drugs education- Reproductive Health- Safe Motherhood- Peace Building- Women and Youth: Pillars for Sustainable Peace- Accompaniment program with families of missing person.
Service day/hour: Sunday to Friday 10am-5pm
Service Fee: free

3. United Nepal Foundation Lumbini

Contact Person: Mr Amit Gupta, Mr. Rajash Regmi
Contact No: 071-520072, 9804400948(Amit), 9806958170(Rajesh)
Email Address: unfl.bhairahawa@gmail.com
Address\Location: Bhairahawa.Butwal(Way to Milan Hall)
Activities\programs: Comrehensive package for IDus in Butwal and Bhairahawa, Crisis care center at Butwal
Service day\ hour:Sunday to friday 10 am-4pm (In house 24hours)
Service fee: Free

4. Nagarjun Development community (NDC)

Contact Person: Mr Srijana Gyawali
Contact No: 071-621782
Email Address: ndc.btwl@gmail.com
Address/ Location: ButwalMunicipaity ward number11.Milanchowk Rupandehi(Near Butwal Buspark)
Activities/ Programs: STI Treatment VCT for Migrants and their family, Prevention of HIV among drug users
Service day/ Hour: Sunday to thurstday 10 a5pm (Friday 10am-4pm)
Service fee: Free

5. Name of Organization: Family planning association of Nepal (FPAN) Rupandehi

Contact Person: Mr. Mohan Bashyal, Ms. Bishnu Gyawali
Contact No. 071-540081, 9847045220, 9847027404
Email: fpanrupandehi@gmail.com
Address: Butwal Municipality ward No. 5, Hatbazar line Rupandehi
Activites / programs: STI treatment, VCT for all people, family planning service, HIV AIDS orentationprogramm for migrants, transport workers and youth group
Service day / hour: Sunday to Friday 10 am to 5 pm

Service fee: As per organization rule

6. Sakriya SewaSamaj, Butwal

Contact Person: Mr. Chunna Prasad Gyawali, Mrs. Bishnu Gyawali
Contact No. 071-438324
Email: apalpali@gmail.com, cpnawali@gmail.com
Address: Butwal Municipality Ward No. 13, Awas Path Kalikanagar
Rupandehi
Activities / Programs: HID AIDS awareness activities, Community
and home based care, Capacity Building for self help group and
advocacy
Service day / hour: Sunday to Friday 10 am to 5 pm
Service fee: Free

7. Sungabha Community Development Center

Contact Person: Mr. Gopal K.C.
Contact No. 9847039188
Email: N/A
Address: Rudrapur Ward No. 1 Sungabha Chowk, Rupandehi
Activities / Programs: HID AIDS awareness activities for migrants,
behavior change, peer education, IGA program for PLHA and
Capacity building for self help group
Service day / hour: Sunday to Friday 10 am to 5 pm
Service fee: Free

8. Blue Diamond Society

Contact Person: Mr. Bishnu Pandey
Contact No. 071-524862
Email: msmgnepal@yahoo.com
Address: Siddharthanagar Municipality, Bank colony Rupandehi
(ICFC Finance Building)
Activities / Programs: Prevention / care and support to MSM/ MSW
Service day / hour: Monday to Friday 10 am to 5 pm (in house 24
hours)
Service fee: Free

9. Sakar Samuha Nepal

Contact Person: Mr. Keshav Rai
Contact No. 071-527048
Email: ssnbhw@wlink.com.np
Address: Siddharthanagar Municipality -8, Anchalpur Bhairahawa
Rupandehi
Activities / Program: O.I treatment and referral, livelihood support,
educational support for children, group formation, home based care
services, awareness and advocacy program etc.
Service day / hour: Sunday to Friday 10 am to 4 pm (In house 24
hours)
Service fee: Free

- 10. Wisdom Drug Treatment and rehab. Center**
Contact Person: Mr. Nabin Kumar Tamrakar
Contact No. 9807560660
Email - N/A
Address: Butwal 14 Nayagau, Rupandehi (Near the East West Highway)
Activities / programs: Drug Treatment and rehabilitation, HIV Prevention
Service day / hour: Sunday to Friday 10 am to 5 pm (In house 24 hours)
Service fee: Free
- 11. Lumbini Drug Treatment and rehabilitation Center**
Contact Person: Mr. Raja Pratap Shahi
Contact No. 9847050015
Email: ldtrcbhw@wlink.com.np
Address: Siddhartha Nagar Municipality Bhairahawa, Rupandehi
Activities / programs: Drug Treatment and rehabilitation, HIV Prevention to IDUs/DUs/Youth
Service day / hour: Sunday to Friday 10 am to 5 pm (In house 24 hours)
Service fee: Free
- 12. Blue Diamond Society (BDS) Rupandehi**
Contact Person: Mr. Charls Bon Sijapati
Contact No. 071541203
Email: rupandehibds@gmail.com
Address: Butwal 10, Sukkhanagar, Tribhuwan path RajmargaChauraha, Rupandehi
Activities / programs: HIV AIDS awareness programs advocacy and human rights program for MSM/MSW
Service day / hour: Monday to Friday 10 am to 5 pm
Service fee: Free
- 13. AIDS Health Foundation (ART Center)**
Contact Person: Mr. Radheyshyam Shrestha
Contact No. 9851007812
Email: radheshyam.shrestha@aidshealt
Address: Lumbini Zonal Hospital (Butwal)
Activities/ Programs: Support sevice to PLHA for lab, pharmacy and ARV adherence referral
Service day / hour: Government office hour
Service fee: Free
- 14. Urban Health Center**
Contact Person: Mr. Abhinash Adhikari
Contact No. 9847092221
Email: N/A
Address: Buddhanagar, Butwal 13

Activities / Programs: Prevention and curative service including FP service

Service day / Hour: Government office hour

Service Fee: free

15. Youth Vision Bhairahawa

Contact Person: Mr. Rajesh K.C.

Contact No. : 071-525480

Email: y_vision@ntc.net.np

Address: Siddhartha Municipality Bhairahawa, Rupandehi

Activities programs: Drugs treatment and rehabilitation, HIV prevention to I/Dus

Service day / hour: 10 to 5 (in house 24 hours)

Service Fee: as per organization rules

16. Society Support Group

Contact Person: Mr. Bashanta Singh Thapa

Contact No. 071-546887

Email: N/A

Address: Butwal Municipality -9, Rupandehi

Activities programs: Drugs treatment and rehabilitation, HIV prevention to Dus/ Youth

Service day / hour: 10 to 5 (in house 24 hours)

Service Fee: as per organization rule

17. Asha Jyoti Sahayog Samaj

Contact Person: Ms. Sasi Gurung

Contact No. 9847197480

Email: ajss@gmail.com

Address: Khadwa Bangain V.D.C. 2, Gopalpur, Farsatkar Rupandehi

Activities Programs: Care & support programmes for PLWHAIGA (IGA-Income generating activities) Activities for PLHAS

Service day / hour: 10 to 5 (in house 24 hours)

Service fee: Free

18. KI Nepal

Contact Person: Ramesh Sapkota, Yuvraj B.K.

Contact No. 9857029535, 9851041960

Email: kinpalsh@gmail.com

Address: Butwal Municipality 13, Yogikuti

Activities Programs: Anti girls trafficking, awareness rehabilitation Center in Bhairahawa & Butwal, counseling, IGA activities for FSWS.

Service day / hour: Monday to Friday 10 to 5

Service fee: Free

19. ABC Nepal Rupandehi

Contact Person: Ms. Sushil Raj Giri

Contact No. : 071527606
Email: abcnepal.rup@gmail.com
Address: Siddhratha Nagar Municipality- 8 Bank Colony
Bhairahawa,Rupandehi
Activities Programs: Anti girls trafficking, wareness rehabilitation
counseling, rescue and RH Clinic
Service day / hour: 10to 5
Service fee: Free

20. Maiti Nepal Rupandehi

Contact Person: Ms. Prabha Khanal
Contact No. 071523534
Email: info@maitinepal.org
Address: Siddhartha Nagar Municipality,
Anchalpur,Bhairahwa,Rupandehi
Activities/ Programs: Anti trafficking safety networks Awareness
community outreach programmes, Gainful employment
opportunities for survivors of trafficking, high risk girls and women
refer to Ktm for Hospice service, Students against girls trafficking,
transit home, soliciting the rights of restaurants employees,
counseling and legal support
Service day / hour: Sunday to Friday 10 to 4
Service fee: Free

21. Aasha Jyoti Shayog Samuha

Contact Person: Ms. Sujita Adhikari
Contact No. 9847304081
Email: ajss_bhw@yahoo.com
Address: Siddhartha Nagar Municipality, Bhairahawa, Rupandehi
Activities Programs: Care and support programs for PLWHA
Service day / hour: 10 to 5 (In house 24 hours)
Service fee: Free

22. Lumbini Zonal Hospital Butwal

Contact Person: Dr. Nandu Pathak, Ms. Shanta Rana
Contact No. 071-542248, 540200, 9857030291 (Shanta Rana)
Email: mn_ns@hotmail.com
Address: Butwal Municipality- 8, Hospital Line ButwalRupandehi
Activities/ Programs :ART service , VCT service, CD4 count OI
management and treatment, TB(DOTS) treatments, 24 hours
emergency service for other hospital service (all type hospital
services as a Zonal Hospital Standard of gov. of Nepal)
Service day / hour: 10 to 5 (emergency 24 hours) as per gov. rules
Service fee: as per hospital rules

23. Siddhartha AMDA Bal / Mahila Aspatal, Butwal

Contact Person: Dr. Binod Parajuli, Mr. Shrikanta Subedi
Contact No. 071-544450, 9847049637 (Shrikanta Ji)
Email: scwh.butwal@amda.org.np

Address: Butwal Municipality 9, Deepnagar Amda Line Butwal, Rupandehi

Activities Programs: OI treatment, TB treatment and 24 hours emergency service for Children and women for all type hospital service

Service day / hour: 10 to 5 (Emergency 24 hours)

Service fee: as per hospital rules

24. Bhim Hospital

Contact Person: Dr. Manohar Joshi, Ms. Yamuna Ji

Contact No. : 9849279811, 071-520193

Email: N/A

Address: Siddhartha Nagar Municipality 7, Bank road Bhairahawa, Rupandehi

Activities Programs: VCT service, TB treatment (DOTS) 24 hours hospital emergency service

Service day / hour: 10 to 5 (Emergency 24 hours)

Service fee: as per hospital rules

25. Astha Samuha

Contact Person: Mr. Keshav Pun

Contact No. 9807505995

Email: N/A

Address: Butwal Municipality Traffic Chowk

Activities Programs: Referral IDUs to zonal hospital for methadone

Service day / hour: 10 to 5

Service fee: Free

(NAMUNA, Butwal)

In total 25 organizations are found working in HIV/AIDS in Rupandehi District with different services. Most of the organizations are providing their services without any cost.

CONCLUSIONS

HIV/AIDS is being more challenging in the world as well as Nepal. So different persons, organizations, communities, nations and international organizations are working in this field to control HIV/AIDS and reduce the harms. Mostly 17 types and their about 250 branches are providing services in national wise program on HIV/AIDS in Nepal. Altogether 25 organizations (Including Government and Non-Government) are working on HIV/AIDS in Rupandehi district with different services; most of the organizations are providing their free services while most of the organizations are working at town areas. Decentralization is necessary to provide better services where many people are not public because of lack of

awareness and hesitation. So, there is an urgent need to make the people aware by establishing more such organizations in different areas of the district.

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