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AN ANALYSIS OF NEPALESE YOUTH UNDERSTANDING LEVEL ON CLIMATE CHANGE



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ABSTRACT

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Keywords Climate change Youth understanding Primary survey Logit regression model. This study aims to analyze the level of understanding about climate change among the Nepalese youth. Perceptions regarding the knowledge about climate change, climate change indicators, impact made by such change, government intervention and various climate change policies were investigated. The exploratory survey was conducted with the help of self-administered questionnaire. A total of 954 youth studying at the different levels were selected purposively from about 2 dozens of schools and colleges that represent 4 different Universities, Higher Secondary and Schools in different areas of Kathmandu Valley. Both descriptive as well as inferential statistics were applied to analyze the data. The logistic regression model was used to test the hypothesis. The model prepared 5 different hypotheses to identify the actual level of youth understanding about climate change. The study results that 98% youth are aware about climate change. Similarly, the logit model revealed that youth are well aware of climate change since factors like study level, age, gender, formal education about climate change, participation in various climaterelated training, climate change talk on family and society, access to mobile phone and use of mobile phone for climate change learning are found to be statistically significant at desirable probability level. However, in spite of youth awareness on climate change, still, they are unknown about the coping strategies such as adaptation and mitigation implemented by the government. It indicates government should transmit similar information via all possible channels to the youth so that the plan and policies that are related to climate change can be successfully implemented.

Contribution/ Originality: The key contribution of this paper is the establishment of results about climate change understanding level of Nepalese youth studying at different Schools, Colleges and Universities in Nepal. Researchers applied logistic regression model using original data generated from the field surveys.

1. INTRODUCTION

Human action in adaptation, as well as mitigation, has the greatest potential for reducing the adverse effects of climate change which in itself is a result of the action of humanity (Smit *et al.*, 2000; Swim *et al.*, 2011; Shahadu, 2012). In order to have an effective action against such changes, the understanding climate system is pivotal (Standish, 2005; Whitmarsh, 2009; Bierbaum and Stults, 2013). The science of climate change involves

understanding the working of the extremely complex climate system and predicting how this system might respond to increase the atmospheric concentration of GHGs (Baede *et al.*, 2001; Schreiner *et al.*, 2005). The successful understanding of climate change and its implications is imperative to evolve strategies and actions plan to adaptation and mitigate the adverse impact and also building capacity to tackle the emerging problem (Singh and Singh, 2011; Weber and Stern, 2011; Carter *et al.*, 2015).

Peoples understanding and awareness level on climate change have been increasing since 1980 A.D. and now the rate is higher (Boykoff and Roberts, 2007; Ochieng and Koske, 2013; Shwom *et al.*, 2015). Such understanding level on climate change is well discussed in many studies including Weber and Stern (2011); Lineman *et al.* (2015) and are known to differ between nations and to have fluctuate over time (Taylor *et al.*, 2014; Capstick *et al.*, 2015). Niles and Mueller (2016) opined that such perception may be influenced by many factors beyond local shift in weather. In this respect, age; education and exposure to mass media, previous effects from CC events affected knowledge, preparedness, and severity of CC triggered events are significant predictors of climate change perception (Huda, 2013; Le *et al.*, 2016).

However, the youth perception on climate change is less explored. Among youth, there is a fairly low level of knowledge about the basic scientific concept that underpins climate change and tendency to underestimate the level of scientific consensus on climate change (Leiserowitz *et al.*, 2011). Since, youth people are in unique position as they face the reality of the changing climate (Corner *et al.*, 2015) and are considered as an important segment in present and future to shoulder the responsibilities of their nation as well as the entire world for the development (Innocent and Odoh, 2014; Nwobodo and Agwu, 2015). The youth's perspectives on climate change are of paramount importance to build countries ownership, capacity and awareness to tackle the climate change problem (Singh and Singh, 2011; Conway and Mustelin, 2014).

Studies revealed that climate change in Nepal is real and there are lots of climate related effects, in all the sectors from agriculture to industries, the country already faced (Malla, 2009; Karn, 2014; Devkota and Phuyal, 2015). Perception of the local people regarding climate change and its effects conducted in various sectors in Nepal concludes that Nepalese people perceived rise in temperature and decrease in rainfall that have impact various aspects of local life (Devkota, 2014; Sada *et al.*, 2014). In the country, youth comes between the ages of 16-40 years which accounts for 40.33% of the total population (MOYS, 2014) that includes 54.5% of female and 45.8% of male (CBS, 2012). Among the youth, still the highest proportion i.e. around 40% male and 70% female belong to the occupation category of agriculture, forestry, and fishery for their livelihood which is the climate prone zone (ADB, 2009; Dulal *et al.*, 2010; Upadhyay and Sachdeva, 2010).

The government of Nepal has stepped programs, plans and policies along with several actions (Tamrakar, 2013) to cope with climate change impacts, and reduce impacts of climate change on its people, property, and natural resources (MOPE, 2016). Similarly, Nepal government has introduced environment science as a coursework for schools and universities from the decade of late 1990s. However, it is not sure whether all the youth undergo with this subject during their studies and the offering subject is well enough to develop their skills which are expected for the future action. Similarly, what factors affect such knowledge; what are the relevant sources of information and whether technological improvement is improving their understanding are pertinent questions. Therefore, the overall purpose of this study is to know the Nepalese youth understanding level on climate change.

The remaining part of the paper is organized in three sections. In the next section, materials and methods used will be discussed. It is followed by a result and discussion of the key issues and finally concluding remarks.

2. THE METHODOLOGY

2.1. Conceptual Framework

This study falls under the behavioral economics - branch of economics that uses psychological experimentation to develop theories about human decision making and has identified a range of biases as a result of the way people

think and feel. Burke *et al.* (2016) argued that when the effectiveness of a given policy is closely tied to how individuals interact with it, it is important to understand these dynamics more clearly. Behavioral Economics does not assume that humans make choices in isolation, or to serve their own interest; it also considers social forces, aside from cognitive and affective (emotional) dimensions, in that decisions are made by individuals who are shaped by and surrounded with social environments (Samson, 2014).

In environmental issues, people constantly take actions and behave in certain ways that reflect the most appropriate and effective environmental choices (Clover, 2002). Addressing such environmental behaviors, understanding individual motivations and differences in behavior by environmental educators are important (Heimlich and Ardoin, 2008).

Our belief, in this context, is that understanding of climate change is based on the level of education, training, and conferences, a family who talks about climate change in their family, knowledge about government policy, access to mobile phone and the internet as called ICTs and member of the social network. It is apparent that high level educated youth have more knowledge, the ability to understand and suppose to expect to change, able to forecast future scenario and have greater access to information and opportunities thereafter (Uddin *et al.*, 2017). Hence, the notion of awareness and understanding are interrelated (Masud *et al.*, 2016).

2.2. The Empirical Model

In this study, perception is measured by a dummy variable in the model which was assigned a value of 1 for youth who understands about climate change and a value of 0 for youth who did not. It indicates that the probability of a young with a given set of attributes fall in one choice (perceive) rather than the alternative (or not) but not both. The understanding level of climate change is measured on various aspects as understanding of climate change, understanding of climate change indicator, hampering of climate change, government intervention of climate change and climate change policies.

A logistic regression model was selected to identify the significant variable that determines whether youth understanding level about climate change or not. Since logit model is best to describe observational data, which is the main data of our study, this study used a logit model to identify the factors affecting youth understanding level about climate change and other variables. The advantage of logit model is that it guarantees the estimated probability increase and never crosses the range of 0 - 1.

Suppose Υ is the knowledge of climate change among the youth which is a random variable and X is the socioeconomic factors, use of ICTs etc. For such a dichotomous outcome, the inferential statistical analysis used for this study is a logistic model (Mabe *et al.*, 2014). The effect of X on the response probabilities, P(y = j/x) can be estimated by using binary logit model which is expressed as:

$$P(Y_i/X) = F(Z_j) = \frac{e^{z_i}}{1 + e^{z_i}} = \frac{1}{1 + e^{-z_i}}$$

$$P(Y_i = J/X_i) = F(Z_j) = \frac{e^{z_i}}{1 + e^{z_i}} = \frac{1}{1 + e^{-z_i}}$$

$$Z_i = \beta_0 + \beta_1 X_{1i} + \dots + \beta_n X_{ni} + \mu_i \dots \dots \dots \dots \dots (1)$$

The logit regression equation, that is used to ascertain variables influencing youth understanding level of climate change, is:

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7 + \beta_8 x_8 + \beta_9 x_9 + \beta_{10} x_{10} + \beta_{11} x_{11} + \beta_{12} x_{12} + \beta_{13} x_{13} + \mu_0$$

Since this study aims to measure five different dependent variables on the basis of given explanatory variables, the hypothesis for each dependent variables are as follows:

 H_0M_{1i} = there is no significant relationship/association between climate change and the given explanatory variables

 H_0M_{2i} = there is no significant relationship/association between climate change indicators and the given explanatory variables

 H_0M_{3i} = there is no significant relationship/association between climate change impact and the given explanatory variables

 H_0M_{4i} = there is no significant relationship/association between government intervention on climate change and the given explanatory variables

 H_0M_{5i} = there is no significant relationship/association between climate change policies and the given explanatory variables

Table 1 depicts the explanatory variables and how they are measured with given dependent variables.

Explanatory Variable	Description	Measurement	Priori Expectation	Slope Coefficient
<i>x</i> ₁	Study Level	1 if they study bachelor and above, 0 otherwise	+	β ₁
<i>x</i> ₂	Age	In Years	Ŧ	β_2
<i>x</i> ₃	Gender	1 if male, 0 otherwise	Ŧ	β ₃
<i>x</i> ₄	Formal Education About Climate Change	1 if yes, 0 otherwise	+	β_4
<i>x</i> ₅	Participant in any Seminar, Training or Conference	1 if yes, 0 otherwise	+	β ₅
<i>x</i> ₆	Heard About Climate Change Impact	1 if yes, 0 otherwise	+	β ₆
<i>x</i> ₇	Climate Change Talk on the Society	1 if yes, 0 otherwise	+	β ₇
<i>x</i> ₈	Family Talking About Climate Change	1 if yes, 0 otherwise	+	β ₈
<i>x</i> ₉	Access of Mobile Phone	1 if yes, 0 otherwise	+	β,
<i>x</i> ₁₀	Whether Mobile is Used for Climate Change	1 if yes, 0 otherwise	+	β ₁₀
<i>x</i> ₁₁	Use of Internet	1 if yes, 0 otherwise	+	β ₁₁
<i>x</i> ₁₂	Frequency of Use of Internet	1 if they use daily, 0 otherwise	+	β ₁₂
<i>x</i> ₁₃	Member of Social Network	1 if yes, 0 otherwise	+	β ₁₃

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Source: Researchers' Calculation/Assumption

2.3. The Data

The study used an exploratory quantitative research design and describes the level of understanding of the youth regarding climate change. It analyzes the level of understanding with the technological changes and other parameters. Kathmandu Valley, located in the center part of the Nepal is purposively selected. The valley consists of 3 districts: Kathmandu, Lalitpur and Bhaktapur¹. Survey data of a total of 954 youth students, studying at different education levels, were collected during the month of August/September 2016 in the Kathmandu Valley of Nepal.

Available universities are selected purposively as per their existence in the valley and the programs affiliated with the universities to represent different aspects of the environmental education (or climate change) related to teaching among the students at different levels. Kathmandu valley, the capital of the country, possesses the most of the educational institutions. Even if universities based outside the valley, their major academic activities lie either a way or another Kathmandu-centric.

A questionnaire was constructed aiming to gather information on knowledge of educated youth regarding changing the climate, access and use of ICT for such climatic purpose and how well they are aware about government policy and plan towards climate change adaptation and mitigation strategies. In order to measure their diverse opinion, the survey includes the different levels of education in four different universities of Nepal along with Higher Secondary Board and School Level. The self-administered questionnaire, that covers 28 questions were given to the 1000 respondents from 2 dozens of schools and colleges that represent various education layers (level) of Nepal. Pilot testing was done among 50 students from 3 different universities and made corrections on the questionnaire as required.

3. DATA ANALYSIS AND PRESENTATION

3.1. Education Level and Affiliation

The study is conducted among 954 students from various faculties of several schools, colleges and universities prevail in Nepal. Among the total respondents, female respondents represent 54% whereas male counterparts are only represented 46%. The majority of the respondents (i.e. 256) are from Tribhuvan University (TU²) followed by 207 respondents from Kathmandu University, 185 from Pokhara University and about 100 from other affiliations. Among the respondents, 600 were undergraduate level students followed by around 200 school level students 149 post-graduate level students. As depicted in figure 2, this study tries to cover most of the course directly and/or indirectly related to the climate change issues. However, this study is unable to cover responses from forestry student which is considered as one of the crucial subjects that is widely discussed in the aera of climate change³.

3.2. Climate Change Knowledge

The finding seems surprising that almost all the respondents are well aware of climate change. 98% respondents mentioned that they know about climate change and only 2 percent are not sure about it. In a question, 756 respondents mentioned that they do have formal education about climate change in various levels. But the majority of the respondents (i.e. 70%) mentioned that they received such information during their school level education. Around 17% students responded that they do received such information from both schools as well as colleges whereas 12% respondents argued they study about climate change only in colleges. Rest a percent

¹ This study excludes Bhaktapur district since it is bit far away from the city and most of the students from the district arrive Kathmandu or Lalitpur for their higher education.

²The representation from TU is more in our study since it is largest institutions that covers majority of course and subjects in Kathmandu valley.

³ Though this study excludes the responses from forestry students, we have discussed with the concerned university and authority to know whether they do have course related to climate change in their syllabus. The response was positive and they mentioned that students of graduate level are well aware about the climate change issues.

respondents reported that they received such knowledge from other sources than the formal education channels. Besides education channel, the major sources of climate change knowledge as per the respondents are TV (200), Newspaper (87), Radio (26), Magazine (14) and combine the sources (201) which indicate that youth are quite aware of another source of information for their update.

Though people said they are aware of climate change, the majority of the respondents are not able to respond about climate change adaptation as well as mitigation strategies prevailing to them. Out of total respondents, about 75% of respondents think the major indicator of climate change is a rise in temperature whereas rest one-quarter of the students have still confusion about the major indicators of climate change. Even they said they are aware of the indicator of climate change, only 20% of the respondents are able to attain any kinds of national and international exposure in the form of seminars and conferences.

3.3. Talk about Climate Change

Among the respondents, 72% of them argued that there is climate change discussion in their society as well as in a home whereas 28% mentioned that there is no such discussion in the home as well as in their society. Among the 628 respondents who said there is talk about climate change on their society and family, 63% reported that their family sometimes talked about climate change whereas 15% mentioned that there are often talks about climate change on their family. Similarly, 6% respondents said they have very often talked about climate change with their family members but remaining 16% respondents reported that their families rarely talks about climate change. Respondents also mentioned that among those families who talked about climate change, 61% shares climate change and/or climate change related work experience among their family members.

3.4. Governmental Intervention about Climate Change

Some policy and program related questions were put to the respondents to know about their knowledge and awareness about government work to the people. In a question, whether respondents heard about hampering of their field from climate change, 557 respondents (i.e. 58%) argued in favor. Among such groups 92% of them are sure about such hampering is driven by climatic change but rest 8% are not sure whether it is climate or any other factors than climate change. However, only the 33% of total respondents i.e. 954 are aware of government intervention on climate change. The governmenthas implemented NAPA program in 2010 to reduce climate-related risk and hazards and endorsed climate change policy to strengthening climate work with speedy and systematic manner. But only about 22% of the respondents know about the NAPA program and only 20 percent know about climate change policy. Furthermore, only 7% of total respondents know about the endorsement date of climate change policy.

3.5. ICTs on Climate Change

We observed that about 94% of the respondents pose mobile phones. Among the mobile phone users, 65% of the respondents use such phones for acquiring climate change information from various sources. 59% of such respondents are also awared about the mobile apps related to climate change. However, only 32% of such respondents are using mentioned apps. It shows, though there are various apps and information available from a mobile phone, people are not able to grab the opportunities either one way or other. Similar to a mobile phone, access to the internet is another important feature to understand climate change in an effective and rapid way. 95% of the respondents mentioned that they have access to the internet. Among the internet users, 73% of them use such internet to study about climate change. 84% of the respondents use the internet daily whereas 13% use some days in a week and 2 percent use weekly. It indicates that the internet is commonly used mechanism by the respondents. It can be utilized for the several purposes that can enhance the overall development and helpful for adaptation as well as mitigation activities under changing the climate. 90% of the respondents are having membership on social site

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network like Facebook, LinkedIn, Twitter and many more. It signifies that program and policies can be delivered effectively via such social networking sites which can prove to be a more effective alternative in informing people about climate change issues and its adaptation and mitigation strategies. It helps people to take precautions.

3.6. Econometric Estimation of Determinants of Youth Understanding about Climate Change

The summary of the logistic regression results is presented in Table 2.

	Youth Understanding Level About						
	Model 1	Model 2	Model 3	Model 4	Model 5		
VARIABLES	Climate Change	Climate Change Indicators	Climate Change Impact	Government Intervention on Climate Change	Climate Change Policy		
Study Level (Bachelor and Above)	1.954^{*} (1.033)	-0.306 (0.319)	0.447^{*} (0.259)	-0.00444 (0.300)	-0.385 (0.270)		
Age	0.103 (0.169)	0.137^{***} (0.0355)	0.0296 (0.0319)	0.210^{***} (0.0350)	0.107^{***} (0.0342)		
Gender	0.0970 (0.536)	0.337^{**} (0.169)	0.0951 (0.139)	0.319 ^{**} (0.150)	0.218 (0.143)		
Formal Education About Climate Change	2.094^{***} (0.597)	0.854^{***} (0.251)	0.474 ^{***} (0.169)	0.653*** (0.196)	1.104^{***} (0.176)		
Participation on Training	$\begin{array}{c} 0.912 \\ (0.555) \end{array}$	0.105 (0.198)	0.189 (0.157)	-0.127 (0.171)	0.339 ^{**} (0.161)		
Climate Change Talk on the Society	0.534 (0.590)	0.445^{**} (0.220)	0.238 (0.165)	0.339* (0.187)	-0.0150 (0.171)		
Family Talking About Climate Change	$\begin{array}{c} 0.423 \\ (0.595) \end{array}$	-0.0636 (0.207)	0.481*** (0.164)	-0.246 (0.182)	0.259 (0.169)		
Access of Mobile Phone	-0.872 (0.935)	-0.173 (0.493)	-0.0949 (0.345)	1.290^{**} (0.649)	-0.599^{*} (0.350)		
Whether Mobile is Used for Climate Change Learning	1.319 ^{**} (0.650)	0.637^{***} (0.200)	0.286^{*} (0.152)	0.658^{***} (0.168)	0.792^{***} (0.155)		
Use of Internet	0.674 (0.953)	-0.0821 (0.516)	$0.368 \\ (0.370)$	-0.198 (0.464)	0.592 (0.374)		
Frequency of Use of Internet (Daily)	-0.120 (0.770)	$\begin{array}{c} 0.0970 \\ (0.256) \end{array}$	$\begin{array}{c} 0.173 \\ (0.200) \end{array}$	$\begin{array}{c} 0.000222 \\ (0.230) \end{array}$	-0.268 (0.209)		
Members of Social Networks	-0.234 (0.869)	$\begin{array}{c} 0.00911 \\ (0.325) \end{array}$	$\begin{array}{c} 0.334 \\ (0.252) \end{array}$	-0.154 (0.295)	0.0484 (0.259)		
Constant	-1.749 (2.841)	-5.498*** (0.825)	- 2.558*** (0.655)	-7.081*** (0.898)	-3.258*** (0.686)		
Mean Dependent Variable	.9821803	.2044025	.5838574	.3333333	.5859539		
McFadden R ² (Pseudo R ²)	0.2573	0.0645	0.0510	0.1111	0.0825		
Observations	954	954	954	954	954		

Table-2. Logistic regression result on Youth Understanding Level

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

From the table, in **model 1**, we observe three variables significantly affecting the change in youth understanding level about climate change out of twelve independent variables entered into the model. Among the significant variables, study level is one that has statistically significant at 10% probability level. Also, it has positive sign that implies youth with higher education, bachelor and above in comparison of schooling level, have a higher

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probability of understanding climate change. Other significant variables are formal education about climate change and whether mobile is used for climate change learning. Formal education is statistically significant at even 1% probability level and shows positive sign indicating that youth with formal education have a higher understanding level in comparison to the one who does not have formal climate change education. Similar to it, use of mobile phone for climate change information is significant with 5% probability level and has a positive sign that indicates the probability of understanding climate change level among youth is high with those who seek climate information

with the device they have. We reject our first hypothesis (H_0M_{1i}) i.e. there is no significant relationship/association between climate change and the given explanatory variables. We conclude that study level, formal education and use for mobile for climate change information are associated with the youth understanding on climate change. However, we fail to reject the null hypothesis in case of rest of the nine variables used in the model 1 since we don't have evidence to suggest that the means are different.

Model 2, revealed that there are some other variables, then model 1, are significant to the dependent variable i.e. climate change indicator. In the model, five variables out of twelve found significantly affecting the change in youth understanding level about climate change indicators. As discussed in previous model, formal education about climate change and use of mobile phones for climate change information are statistically significant on 1% probability level result with positive sign indicating that as per the increase in education and use of mobile phones, youth will learn and understand more about climate change indicators that are concerned by today's scientific community. Similarly, Age is statistically significant on 1% probability level and a positive sign which indicates that as per the age increases the probability of understanding about climate change indicators also increases. Other variables are Gender and Societal Talk about climate change that is statistically significant at 5% probability level. In the case of gender, if the youth is male there is higher probability to know more about climate change indicators. Additionally, youth understanding level of climate change indicator seems high with the youth whose society talk more about climate, changes of such change, the impact from it and mechanism to cope such climatic change. Second hypothesis (H_0M_{2i}) is also rejected since our model found there is significant relationship/association between climate change indicators with the explanatory variables such as age, gender, formal education, climate change talked on the society and use of mobile phones to get information related to climate change indicators.

In model 3, four variables out of twelve were found significantly affecting the youth understanding about climate change hampering to their fields. Formal education and family talking about climate change are statistically significant at 1% probability level which has positive sign implies youth with formal education on climate change and having a family talk on climate related issues have a higher probability of understanding climate change hampering about their field. In this model, study level and use of mobile phone for climate change learning have statistically significant at 10% probability level with a positive sign. That implies youth with higher education, bachelor and above in comparison of schooling level, have a higher probability of understanding climate change. Also, a positive sign of the use of mobile phone to get climate change information indicates that there is a positive change on youth understanding level about climate change hampering to their field as per the increase in the use of mobile phone to search climate change information. Similar to previous two hypotheses, third hypothesis (H_0M_{3i}) is also rejected in case of study level, formal education, family talk about climate change and use of mobile phone to get information. It shows there is significant relationship/association between climate change impacts with the given four explanatory variables.

In **model 4**, the government interventions about climate change have been assessed. Six variables out of twelve i.e. age, gender, formal education, climate change talked on society, access to mobile phone and use of mobile phone for climate change information are statistically significant in the desirable probability level. Here age, formal education and use of mobile phone for climate change information are statistically significant at 1% probability level. Similarly, gender and access to mobile phone with statistically significant at 5% probability level and climate change talked about society with 10% probability level. All the variables have positive sign indicates that as per the age, gender, formal education, climate change talked about society, access to mobile phone and use of mobile phone for climate change information increases, the understanding level of youth about government intervention on climate change also increases. Similarly, the understanding level of governmental intervention on climate change is

high among male compared to female. Likewise, hypothesis fourth (H_0M_{4i}) is also rejected in case of age, gender, formal education, access to mobile phone and use of mobile phone to get information. It indicates significant relationship/association between government intervention on climate change and the selected variables.

In **model 5**, we observe five out of twelve indicators were found to statistically affect the change in youth understanding on climate change policies. Age, formal education about climate change, participation on various training, access to mobile phone and use of mobile phone for climate change information are statistically significant at desirable probability level where all indicators (accept access of mobile phone) has a positive sign. That implies with the desirable changes on given variables there ishigh probability of having knowledge about climate change policy. Access of mobile phone has statistically significant at 10% probability level and has a negative sign which contradicts our assumption that as per the access of mobile phone increases, the understanding of climate change

policies increases. It requires further exploration. Finally, we reject our last hypothesis $(H_0 M_{5i})$ i.e. there is no

significant relationship/association between climate change policy and the given explanatory variables. This study found age, formal education about climate change, participation of climate related training, access to mobile phone and use of mobile phone to get climate related are associated with the youth understanding on climate change.

4. CONCLUDING REMARKS

The present paper described the knowledge about climate change and its sources among the respondents; participations on climate-related conferences and trainings; the societal and family talked about climate change; knowledge about climate change indicators, perception about impact made by such climatic change; knowledge about climate change adaptation and mitigation; information about climate change program and policies initiated by the government and various non-governmental organizations and access to ICTs and the use of such ICTs in climate change information and knowledge purpose. The finding from this study revealed that the majority (98%) of the youth from various study level in the study area are aware about climate change. The majority of the respondents (70%) mentioned that they received such information during their schooling. Similarly, more than two third respondents have argued that climate change discussion is taking place in their society as well as between their family members. Along with this, the study also found that about 94% respondents hold mobile phones and 95% have access to the internet. In both cases, about two third use such ICT devices for climate change information. But surprisingly, only very few percent: 33% of the respondents are aware of government intervention on climate change followed by 22% who knows about NAPA and LAPA; 20% knows about climate change policy and only 7% understand the date of such policy endorsement. The logit model explained that in all model factors such as studylevel, age, gender, formal education about climate change, participation in training, climate change talk on the family and society, access to mobile and use of mobile for climate change learning found to be significantly related to the youth understanding level of climate change and other indicators related to such changes and plan and policies. The result from econometrics indicates that people are well aware of climate change but still they are not much informative about plan and policies that the government has developed in order to cope with changing the climate. It indicates that proper awareness scheme or programs regarding policies and other implementation, from government and other responsible agencies, should be the channel through education and another system that could reach directly to the youth which in turn helps to implement successful plan and policies that can deliver a quality result about Nepalese youth understanding level on climate change.

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