

Contemplating Factors for Sustainable Development of Nepal

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ABSTRACT

This article offers an analysis of development debacles in social, economic and environmental sectors setting the study lenses on attitudes of Nepalese stakeholders. Nepal has been lurching on political instability, unemployment, poverty, import dependency, habitat destruction etc. in spite of having ample natural resources and forever glories like Mt. Everest/Sagarmatha (highest peak), Siddhartha Gautam/Buddha (birth place and light of Asia), and UNESCO heritages along with adoption of policies and principles of periodic planning, liberalization, privatization, and globalization. These grim concerns have compelled for research to dig out development barriers for achieving deep aspirations of Nepalese people and for assisting policy makers and planners to taken out significant results. Factor Analysis has identified chronic development hurdles - government instability, poor governance, rampant corruption, civil bureaucracy red-tapism, foreign employment dependency, harmful socio-cultural practices and untapped resources. The reasons behind failing to strive on sustainable development ladder even being a neighbour of two economic giant countries of world – India and China have to be contemplated for the sake of progress and prosperity of Nepal and Nepalese people.

Keywords: Sustainable Development (SD), Development Barriers, Nepalese Stakeholders, Attitudes, Factor Analysis

1. INTRODUCTION

1.1 Social Aspects of Nepal in relation to SD

Nepal is regarded as the world's newest federal democratic republic country (Government of Nepal, March 10, 2017). In spite of having ample natural resources in forest, water and bio-diversity, it is a landlocked country lies between two economic giant neighbours – India and China.

Nepal is predominantly a rural-agricultural country (Food and Agriculture Organization, 2021). According to last census 2016, it had 26,494,504 populations where males were 12,849,041 and females 13,645,463. The national literacy rate was 65.9 per cent where percentage difference between male and female was 17.7 (Central Bureau of Statistics, 2016, pp. 3-6). It is estimated that the present population would be about thirty million.

Rising number of nuclear families, (Kayastha & Shrestha, p. 197), increasing in gender equity (education and women's involvement in decision making) (ADB, 2010), migration to urban areas, (Himalayan News Service, 2017) etc. are indicating social signs of development. Remittances have played vital role for raising standard of living of most of families (Dhungana B. R., 2014, p. 4). People are attracting towards digitization at faster pace (Dhungana S. , 2017). However, adoption and influence of western cultures, brain drain and foreign employment in Arab countries are serious social problems faced by the country (Adhikari, 2019, p. 74 & 89).

1.2 Economic Aspects of Nepal in relation to SD

Nepal is a less developed country (US \$ 1,039 per capita GDP). The per capita annual average GDP at constant price is increased by 3.29 per cent over a decade. The average economic growth rate is 4.6 per cent of last decade (Government of Nepal, 2020, p. 5). A report on poverty has showed that Nepal's population is multidimensionally poor by 28.6 per cent, where 7 per cent poor people are in urban and 33 per cent are in rural areas (National Planning Commission, 2018, p. viii).

The per capita and household consumption is NRs. 34,829 and NRs. 170,735 respectively (Central Bureau of Statistics, 2010/11, pp. 68 & 78-80). Contribution of agriculture sector to GDP is 27 per cent whereas non-agriculture sector is 73 per cent in FY 2018/19 (Government of Nepal, 2020, p. 5). However, Nepal's two-third population is engaged in agriculture.

Nepal is known as tourist destination country for mountaineering, trekking, rafting and jungle safari, world heritage sites, natural beauties, and cultural richness (Ghimire, 2020, pp. 45-54). However, there are various perennial economic problems faced by Nepal like unproductive uses of remittances, untrustworthy electricity supply, lack of commercialization of agriculture, chemical fertilizer mismanagement, poor connectivity of roads, encroachment of fertile land, rampant corruption, tumbling stock market, natural disasters, government instability, losses of state owned enterprises, informal markets, capital flight, high tax rate structure, international indebtedness etc. (Panthi, 2017); (2021 Index of Economic Freedom); (World Bank, 2021).

Hydroelectricity, agriculture transformation, and entrepreneurship enhancing are major development thrust areas shown by various reports and studies.

1.3 Environmental Aspects of Nepal in relation to SD

The serious environmental effects can be observed in natural resources' relentless use, erratic weather, wildlife habitat destruction, greenhouse gases effects, rising temperature, pollution, and water scarcity (Hamedani, April 2014, pp. 32-33). The forest area covers 40.36 per cent and Other Wooded Land (OWL) covers 4.38 per cent of total area of the country (Food and Agriculture Organization, 2020, p. 3). The major environmental threats and challenges can be pointed as deforestation, conventional harvesting, encroachment in grazing protected areas, poaching animals for high-value products, illegal timber harvesting etc. (Bhusal, Paudel, Adhikary, Karki, & Bhandari, 2018, pp. 15-32).

Nepal holds 25th position in biodiversity richness (Bhattarai, 2020). Majority of people living in rural areas use firewood for cooking that leads to carbon increments as well as growing number of industries are emitting pollutions. Only 42 per cent of waste is collected systematically that shows pathetic condition of waste management system. The SD Agenda for Nepal (SDAN) has emphasized on following: "income, health, population and settlement, forest ecosystem and biodiversity, education, institutions and infrastructure, and peace and security as six main concern areas" (Asian Development Bank, 2013, pp. 1-5). The serious environmental problems that are hurdling SD would be mentioned as all three forms of pollution (air, water & land), carbon emissions, deforestation, high chances of glaciers outburst, natural resources' depletion etc. In gist, this study paper is focused on attitudes of Nepalese stakeholders to identify development obstacles to stride on prosperity path for the country.

2. LITERATURE REVIEW

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987).

SD seems tripod which has three legs: social, economic and environmental sustainability. Social sustainability refers to corruption, unemployment, religion, crony capitalism etc. whereas economic sustainability refers to per capita income, quality of life, entrepreneurship, industrialization etc. and environmental sustainability refers to climate change, habitat destruction, ambient air quality, renewable energy, clean drinking water, timber harvesting from forests etc.

"The concept of sustainable development raises the issue of whether present life-styles are acceptable and whether there is any reason to pass them on to the next generation. Development patterns that perpetuate today's inequities are neither sustainable nor worth sustaining" (UNDP, 1994, p. 19). SD has been a global agenda from more than two and half decades. The foundation of SD Goals (SDGs) is set from Millennium Development Goals (MDGs). The SDGs have to be achieved by 2030 (National Planning Commission, 2015). SD philosophy is adopted to strengthen socio-economic development by considering environmental consequences. The successful implementation of SDGs plan would open numerous opportunities in aforesaid period 2016-2030. Government of Nepal (Go N) has taken initiation to align their objectives in SDGs.

SD model would broaden development understanding and policy framing. The models are as follows:

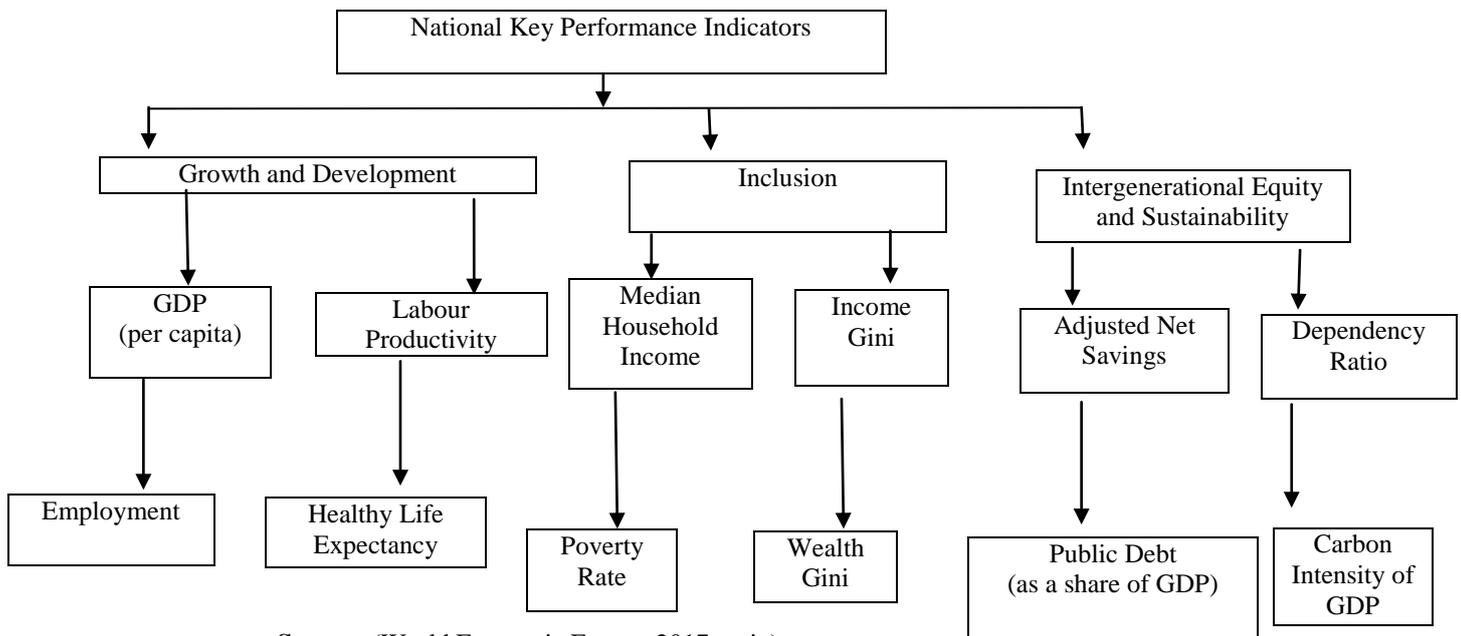
1. Three Pillar Basic Model: It comprises social, economic, and environment. These three stand for equity, growth, and conservation respectively.

2. Egg of Sustainability Model: It shows relationship between people and eco-system i.e. an egg is good when both inside white and yolk are good. Similarly, a society is well only when people and eco-system, both are well.
3. Atkisson’s Pyramid Model: It consists of 5 levels – indicators, systems, innovations, strategies, and agreements.
4. Prism of Sustainability Model: It shows interrelationship of care, access, democracy, and eco-efficiency. It depicts relation between dimensions and its influencing policy.
5. The Amoeba Model: This is an optimal approach for accelerating innovation process and for achieving SD. It helps to assess system’s condition focusing on four dimensions i.e. material production (metals, minerals, plastics etc.), product manufacturing (metal components, plastic components, textiles, electronics components etc.) use (consumption, maintenance, lifetime etc.) and end of life (recycling, reuse, sorting etc.)

(Hamedani, April, 2014) The above models are not universal remedy for all SD ills. However, it provides an integrated technique to address different aspects of SD and helps to explore new model for Nepal.

Prof. Subhash Sharma has portrayed development picture in three forms of emancipation (simultaneous emancipation from three forms of domination) i.e. natural emancipation (freedom from material domination of floods, cyclones, germs of diseases etc.), social emancipation (liberation from politico-economic domination of individual, group, class, society, nation etc.) and cognitive emancipation (freedom from cultural, ideological, religious, spiritual or intellectual domination of another individual, group, class, society or nation). (Sharma, 2006) So, it is cumbersome to emancipate and get rid of all three forms of dominations for development in the countries like Nepal where human resources are scarce within country to tackle such problems in mastery way. World Development Indicators 2016 have highlighted featuring SDGs’ where 214 economies and 14 country groups are organized into six themes viz. “world view, people, environment, economy, states and markets, and global links” (World Bank, 2016).

World Economic Forum has shown development indicators in flow chart as follows:



Source: (World Economic Forum, 2017, p. ix)

The above indicators would help to identify the existing development flaws and give ideas for future betterments. But index calculation and its analysis are complicated tasks to be furnished for development. It requires strong databases and experts where Nepal lacks in those matters.

A study on multivariate I-distance approach to rank countries of Middle East and North Africa by help of selected socio-economic indicators has shown number of different variables in four headings Economic (GDP per capita and growth, Imports and Exports of goods and services, Agriculture, Industry and Services), Social (Primary completion rate, Adult Literacy rate and Unemployment rate), ICT (Telephone lines, Internet users, Mobile cellular subscriptions and Secure internet servers) and Health (Mortality rate under-5, Number of nursing and midwifery personnel, Number of physicians, Total expenditure on health per capita) (Nimanja

Milenkovic et al., 2014). It has a long list of development variables but mute on factors of environmental considerations.

Moreover, a study jointly done by two bodies of Go N in 2003 has presented 28 indicators of ‘different sectors such as health, education, agriculture, employment, demography, access to facilities and others’ (National Palnning Commission Secretariat & Central Bureau of Statistics, 2003). This study is also silent on environmental factors which are foremost for SD of a country.

Mr. Rao has presented a list of sixty-four SD indicators in the key seven headings for development planning. The highlighted points are population, health and nutrition, housing and environment, education and culture, employment, working conditions and social security, social defense and welfare and income, consumption, and wealth (Rao, 1975). The discussed points need to be enlarged on broad spectrum with inclusion of new variables like gross national happiness (GNH), environmental factors and so on.

“The attitudes of people and communities towards sustainable development remain an important factor in the advancement of sustainable development, in that it is difficult to move forward when people and communities are not supportive of sustainable development and the ideas embodied within it. The needs of people are an important factor in sustainable development initiatives, especially in developing and poorer countries. Education efforts to improve attitudes, views and actions in relation to sustainable development have been made, especially focused on youth.” (Rosen, 2017, p. 1)

Thus, the successful implementation of SD is mainly depended on rightful roles played by stakeholders with right attitudes. Development is enhancement of human capabilities, creating opportunities and providing various choices to people. It is more associated with poor and powerless people. Attitudes and stakeholders are study concerns for identifying development disturbances of Nepal. According to Thurton (1929) “attitude may also be defined as the sum total of man’s inclination, feelings, threats and conviction about any specific topic” (The Components of Attitude Education Essay, 2020). Attitude can be described as a tendency to react positively or negatively to a person or circumstances. It either defines or destroys a person. he term stakeholder is meant as an individual, group or organization that gets impacted by the reasons or outcomes of a problem (Bryson, Cunningham, & Lokkesmoe, 2002).

In broader sense, stakeholders are the interested parties of individual or organizations that are participated or affected by an action or policy and are included in decision making process directly or indirectly. By the above definitions and discussions, SD appears vague and vast due to its interdisciplinary nature. The various opinions on SD may have indication of high stakes involved (Gallopín, March 2003). Thus, it is imperative to deeply dig out long standing development hurdles by studying the attitudes of stakeholders for sake of wellbeing of Nepalese people.

3. RESEARCH METHODOLOGY

Factor Analysis (FA) is adopted to explore the attitudes of Nepalese stakeholders that hindering SD of Nepal. Total fifty-three questions had been formed in five questionnaire groups: attitudes of stakeholders (9), social aspects (13), development aspects (12), economic aspects (10), and environmental aspects (9) of Nepal respectively. Thus, primary data were collected through structured questionnaires which were presented to pertinent persons. The secondary data were used as reference for this research.

The sample size was selected on basis of stratified random sampling method from different selected personalities of Nepal like economists, sociologists, developmentalists, environmentalists, consumerists, bureaucrats, doctors, lawyers, chartered accountants, ambassadors, businessmen, entrepreneurs, politicians, provincial citizens (rural & urban) and other professionals through the structured questionnaires in the five point Likert scale along with open discussions at large. Data analysis software – Statistical Package for the Social Sciences (SPSS) was applied for computations, evaluation, comparison, and interpretation of FA.

4. RESULTS AND DISCUSSIONS

The computed values and their analysis of KMO measuring sampling adequacy and Bartlett’s Test of Sphericity are as follows:

Groupwise Questionnaire Measurement Variable	Group One Attitudes of Stakeholders	Group Two Social Aspects	Group Three Development Aspects	Group Four Economic Aspects	Group Five Environmental Aspects
KMO Measuring Sampling Adequacy	0.694	0.845	0.753	0.824	0.828
Approx. Chi-Square	216.327	561.842	345.990	421.909	361.581
Df	36	78	66	45	36
Sig.	.000	.000	.000	.000	.000

Table 1: KMO and Bartlett’s Test of Sphericity

Kaiser-Meyer-Olkin (KMO): By viewing above table, all five groups’ KMO is greater than threshold (cut off) value 0.5 which is absolute minimum, recommended by Kaiser in 1974. So, all values above 0.50 are technically acceptable. It means that samples are adequate to make useful factors and have related variables. In short, the table indicates that FA can be done in all five groups.

Bartlett’s Test of Sphericity (BTS): The above table shows all five groups’ significance values are 0.000. General assumption is that if significance value of BTS is less than 0.05 (5%), null hypothesis is rejected. It means that evidence in sample is strong enough to reject null hypothesis at population level. In other words, p-value of 0.000 signifies that difference between two proportions is statistically significant. It means 95% chance that alternative hypothesis is true and null hypothesis would be rejected. It indicates that research questions have related variables and able to make useful factors and some relationship between variables therein. In brief, decision is taken on the basis of first and last row values of all five groups.

The FA has identified most significant questions through extraction method of Principal Component Analysis (PCA) and rotation method of varimax with Kaiser Normalization. It has extracted questions in component groups which are underpinned and analyzed as follows:

4.1 Group One: Attitudes of stakeholders towards SD of Nepal

Questions	Component		
	1	2	3
A8 The lifestyles of Nepalese stakeholders are gradually changing after adopting SD philosophy.	.814		
A7 By adopting SD philosophy, it has brought the astonishing opportunities to the stakeholders of Nepal.	.784		
A9 Nepalese stakeholders have considered that SD will have brought new charming era on Nepal and to their people.	.690		
A2 SD philosophy is accepted by the GoN to address the development aspirations of Nepalese stakeholders.		.803	
A1 Stakeholders of Nepal are ready to accept the globally agreed philosophy of SD.		.792	
A6 Nepalese stakeholders' activities are on the right direction where global SD goals are set.		.595	
A5 The vested interests of stakeholders are hindering SD of Nepal.			
A3 SD Concept and actions are necessary for bringing positive impact with the help of stakeholders' awareness and their will contributions.			.789
A4 The right practices of stakeholders have to followed for the smooth functioning of SD.			.730

Table 2: Computation of Rotated Component Matrix in SPSS: Group One
Rotation converged in 5 iterations.

The table has showed that FA has identified three constructs or components. If it is assumed that value equal and above 0.600 is considered as baseline for question selection then questions are fallen under first component (A8, A7 and A9), second component (A2 and A1) and third component (A3 and A4). The component questions are merged by considering the underlying traits:

Component 1 – ‘SD changes lifestyles and brings opportunities’

Life style was attended by researchers and economic experts in 1950s. It is ingrained in actions (jobs, hobbies and funs), communications (families and friends) and believes (political, religious, social). It has a significant impact on social capitals (degrading human values, interrupting social relationship networks, irresponsible behaviour, deception etc.) economic aspects (consumerism, mines, metals, fossil fuels etc.) and environmental concerns (contaminated water, cutting trees, soil erosion, indiscriminate hunting etc.) (Farhud, 2017).

Nepal is a multicultural and multi-ethnic society. Traditional joint family concept is gradually changing to nuclear family structure. About one third population is engaged in age old agricultural farming occupations. Most of the educated people want to secure their future through ‘Sarakari Naukari’ (government job) because of permanent monthly salary (Sigdel, 2016).

Dal-Bhat-Tarkari (lentil-boiled rice-vegetable curry) is main course of meal of Nepalese people. Other western cuisines and organic foods are also young generation choices. Daura-Suruwal-Dhaka Topi (men) and Sari-Cholo (women) are national dress of Nepal.

As per 2011 Census, more than 80 per cent of people are following Hindu religion in Nepal. Buddhism is in second place (Government of Nepal). Nepal is one of the unique countries in world in respect of religion and ethnic forbearance (Unity in Diversity). Lifestyles mainly come from four areas i.e. food, clothes, homes, transport and purchases of electronic appliances. Sustainable living and lifestyles are framed in SDGs no. 4 of Education and 12.8 of Responsible Consumption.

Nepalese people are eager in development issues due to long standing of unemployment, poverty, and lethargy state mechanisms. They are trying to trade-off on three considerations of SD: economic goals, ecological issues, and social equity for businesses or entrepreneurships. Market opportunities are expanding in sectors like renewable energy, nanotechnology, electric vehicles, advanced online services, green products, supply chains and so on. But small scale local and indigenous business companies would have faced threats of survival and growth due to its low investment structure and limited market coverage.

Business and SD Commission has identified \$12 trillion worth of business opportunity in SDGs from large-scale technological reform in farming to electric vehicles and car sharing. SDGs are increasingly adopted across government, society, and private sector which help to uplift 10 billion people to thrive together for human civilisation and mother planet - Earth (Globe Series, 2018). SDGs are not only subject matter of planet considerations but also generating large number of opportunities in the business community.

Component 2 – ‘SD is accepted by stakeholders, especially government for meeting development aspirations’

SDGs finally agreed in UNGA held in September 2015. As a member of the UN (14 December, 1955), Nepal is a part of this global initiative. Nepal has developed SDGs Status and Road Map 2016 – 2030 and integrated into 15th National Development Plan (2019/20 – 2023/24) along with 25 Year Long-Term Vision 2100.

Nepal has got some positive results in reduction of poverty and infant/child/maternal mortality rates. Similarly, 33 per cent of women’s participation is guaranteed in parliaments and local levels in constitution of Nepal. The participation in local governments is in rising trend. In addition, Nepalese people’s accessibilities are notably increased to drinking water (90 per cent), sanitation facility (99 per cent), electricity (88 per cent) and living in safe houses (40 per cent) (United Nations, 2020).

The big challenges are factors to be maintained for closer cooperation, coherence and coordination among Nepalese stakeholders i.e. governments, development partners, civil society, business community, volunteers etc. Nepal is aspiring to graduate from least developed country by 2022.

Component 3 – ‘Stakeholders’ awareness brings rightful SD practices’

Stakeholders would be engaged through five levels i.e. inform, consult, involve, collaborate and empower in decision making process from information sharing to participation.

The stakeholders' participation for setting goals would increase visibility, inclusivity and advocacy activities along with policy formulating and supporting governance systems.

Active stakeholders like environmentalists, feminists, human right activists, consumerists would come together and put the hands to government policy framing and its implementation phase and appeal people to participate in SD programme. Rural people/community members' mobilization would pave the way for public participation in SDGs through government initiatives/programmes. Print or electronic media, government publications, banners, flyers, t-shirts, brochures and creation of social networks and promotional materials with graphic presentation would educate the community members. Elected public representatives and government officials would coordinate concerned stakeholders and evaluate SD activities periodically and gauge their implementation gaps timely.

UNDP would constantly support GoN mainly into two: employment creation through rural enterprises and policy support in pro-poor development planning and monitoring along with training of local stakeholders in various levels. UNDP's Micro-Enterprise Development Programme (MEDEP), funded by Australian Government, which was a viable model of poverty alleviation and social inclusion (UNDP).

4.2 Group Two: Social Aspects of Nepal

Questions	Component			
	1	2	3	4
S11 Educational systems have to be rightly adapted and developed to enrich young people's capabilities for sustainable livelihoods through formal and informal employment and/or entrepreneurship.	.810			
S8 The corruption level has to be reduced with zero tolerance mechanism to improve governance in Nepal for SD purpose.	.802			
S7 The rights of geographically scattered marginalized and disadvantaged social groups who are economically poor, have to be largely included in national development policy.	.709			
S12 The levels of clandestine illegal activities, such as drug trade, prostitution, money laundering, smuggling, human trafficking and trade in counterfeit medication have to be reduced for SD.	.678			
S6 The government administrative actions are lacking, related to their service delivery which have to be implemented effectively for fruitful results in SD.	.612	.535		
S9 Health facilities should be provided to the people by the government initiatives for SD.	.566			
S5 The GoN is unable to utilize the foreign employment earnings (remittance) of people and their achieved skills.		.801		
S4 The SD is being primarily hindered by government bureaucracy and its mismanagement.		.770		
S10 GoN should effectively be formulated and implemented family planning policies in the way that promoted equality and equity in deep rooted traditional mind framing of Nepalese people in race, gender, religion, and bad cultures.		.465		
S1 Bad practices (deviating from core spirit) ill practices associated with cultures and religions are constantly hindering SD of Nepal.			.874	
S13 For better consequences of SD, the shift from national sovereignty to global governance has to be pursued to fight against global disaster or epidemic.			.576	
S2 Vocational and skillful education is necessary for employment, entrepreneurship and creating social awareness and ultimate aim to enhance development goals.				.776
S3 Nepalese people's foreign employment is a compulsion, not a willful option of making bread and butter to raising their standard of living.				.741

Table No. 3: Computation of Rotated Component Matrix in SPSS: Group Two
Rotation converged in 6 iterations.

The table shows that FA has identified four constructs or components. The question S6 has cross loadings between component 1 and 2. It means there is a bit problem in question measuring and creates complication in the interpretation of factors. If it is assumed that value equal and above 0.700 is considered as baseline for question selection then questions are fallen under first component (S11, S8 and S7), second component (S5 and S4), third component (S1) and fourth component (S2 and S3). The component questions are clubbed by considering underlying traits:

Component 1 – ‘Good governance for corruption control, inclusion of poor people and their capacity building’

Nepal is parliamentary republic country. It has 753 municipalities and 7 provincial (state) governments. Executive power is bestowed on prime minister. Good governance’s hurdles and challenges are prevalent corruption, political instability, civil society influenced by politics, poor accountability in bureaucracy, unregulated private sector and lack of awareness in people. Corruption is a social sin. People perceive corruption at all spheres of government like judicial system, police, public services, tax administration, customs administration, public procurements, natural resources exploitation and so on. The corruption perceptions index (CPI) 2020 report of Transparency International reported that Nepal is slipped to 117th position among 180 countries from last year’s 113th rank (Transparency International, 2020). This shows that corruption is increasing annually and badly teething Nepalese society and economy. Ultimately, it would adversely affect democracy and government mechanisms and development endeavors.

The Commission for Investigation of Abuse of Authority (CIAA) is an apex constitutional corruption control body which would not have played proactive role in preventing corruption. In short, politics and bureaucracy are main pillars of good governance.

Component 2 – ‘Utilization of foreign employment earnings of people and improve government bureaucracy’

Foreign employment is one of the basic sources of income of Nepal. The remittance contributes to country’s GDP approximately 28 per cent. According to World Bank (WB) data, Nepali migrant workers sent home 8.1 billion dollar in 2018. Nepal is a top four remittance recipient country in south Asia (The Kathmandu Post, 2021).

It is guessed that five million Nepalese people are scattered around the world for study and employment whereas some of them are temporarily or permanently settled in foreign countries. Department of Foreign Employment (DoFE) has issued over four million labour permits to Nepali workers since 2009 in 110 destination countries. Labour migrants have selected countries which top most five are Qatar, The UAE, Saudi Arabia, Kuwait and Malaysia. GoN could not properly use of migrant workers’ skills and their earned monies (Ministry of Labour, 2020). SDGs 8 and 10 are specific to the issues of labour migration and protection of rights of workers. The central government recruits civil servants for all three tiers of government (federal, state and local). The bureaucracy is mostly dominated by high caste Hindus (Jamil & Dangal, 2009). Civil servants are affiliated with political parties through their organizational unions (Giri, 2018). Nepalese bureaucracy is laced with nepotism, favouritism and red-tapism (Upadhyay). The age old structural and functional arrangements are still prevalent in state and local levels that are constantly hindering state delivery mechanism. Nepal has still centralized bureaucracy in spite of federalism in the country.

The SDG 16 and its targets have recognized effectiveness, accountability, and transparency of public administration.

Component 3 – ‘Deviations in cultures and religions’

Primarily, Hindu and Buddhist philosophical ethos and traditions are widely existed in Nepalese society. United Nations Country Team (UNCT) established Harmful Practices Working Group (HPWG) in 2018 was pointed out the prevailing harmful practices like caste-based discrimination, menstrual restrictions including Chhaupadi, child marriage, dowry and witchcraft accusations and persecutions in Nepal. UNCT further added that harmful practices hinder government inclusiveness, political participation, education, agricultural development, health etc. (United Nations Nepal, 2020). These practices prevent to realize principal agenda of 2030 i.e. “Leaving No One Behind”.

The big present-day challenge is to combat with western cultures influencing, Christianity spreading, and gradually adopting in Nepalese society. As per world Christian database, Nepal is one of fastest-growing countries in Christian populations. Most new Christians are from remote, impoverished Dalit (known as untouchable persons) communities who face widespread discrimination and abuses from upper-caste Hindus who dominate four-tier social caste system (Rozario, 2021).

Component 4 – ‘Necessity of vocational education and compulsion of foreign employment’

According to WB report, Nepal is the 19th biggest foreign employment beneficiary of funds sent by Nepalese migrants around the world (Prasain, The Kathmandu Post, 2019). Most Nepalese migrant workers have chosen gulf countries for sake of fulfilling basic necessities. According to WB, Nepalese migrant workers sent home remittances amount \$ 8.64 billion in 2019 which is almost a third of Nepal’s GDP (Prasain & Shrestha, Nepal Remittance, 2020).

According to Central Bureau of Statistics (2017/18), the country’s unemployment rate was 11.4 per cent (male 10.3 per cent and female 13.1 per cent). The number of working age people (15 years and older) is 20.7 million where 69.1 per cent job seekers are aged between 15–34 (Ghimere, 2019). The state would have to protect rights of migrant workers mainly wage theft.

The 6th objective of Global Compact has clearly mentioned that government/state must “provide migrant workers engaged in remunerated and contractual labour with the same labour rights and protections extended to all workers in the respective sector, such as the right to just and favourable conditions of work, right to equal pay for work of equal value, right to freedom of peaceful assembly and association, and right to the highest attainable standard of physical and mental health, including through wage protection mechanisms, social dialogue and membership of trade unions” (Global Compact for Migration, 2018, p. 13). GoN policies and programmes need to be reviewed and analyzed in accordance with UN SDGs.

4.3 Group Three: Development Aspects of Nepal

Questions	Component		
	1	2	3
D12 Under development reasons of Nepal have to be winnowing out through compatible foreign policy with both economic giant neighbour countries -India and China.	.771		
D1 Development signs of a country can be measured by economic parameters in the developing countries like Nepal.	.688		
D10 Local governments with limited budgets have facing hard times to respond to the needs of fast growing metropolitan areas for SD.	.674		
D5 The initiatives of government are major driving force to motivate the stakeholder groups.	.590		
D9 GoN should have supported and ensured the people who are settled in informal urban areas through political, economic, health and social planning and development programmes.	.564		.503
D4 Industrialization is necessary for least developed country like Nepal for their economic boosting.	.440		
D11 The policy reforms are needed to become self-reliant country rather than import-dependency country.		.792	
D7 The brain-drain negatively affects the economic progressiveness of Nepal.		.693	
D3 Economic prioritization is necessary for SD.	.411	.553	
D6 Hydro power generation is the major thrust area for SD.		.531	
D8 The human dignity and respect have to be minutely considerate into development policy and practice.			.785
D2 The fundamental policies and programmes have to be formulated by GoN and stringent actions have to be taken for SD.			.715

Table 4: Computation of Rotated Component Matrix in SPSS: Group Three

Rotation converged in 5 iterations.

Looking at the table, FA has identified three constructs or components. There is two cross loadings of question D9 (between component 1 & 3) and D3 (between component 1 & 2). These cross loadings indicate that there are problems in question measuring and create complication in interpretation.

If it is assumed that value equal and above 0.600 is considered as baseline for question selection. Then questions are fallen under first component (D12, D1 and D10), second component (D11 and D7) and third component (D8 and D2). The respective component questions are clubbed as follows:

Component 1 – ‘Considerations of foreign policy, economic development parameters and limited local budgets’

Great Unifier of Nepal- King Prithvi Narayan Shah said “Nepal is a yam between two boulders” by viewing geopolitical situation of the country. Nepal is following Panchsheel principles as basic foreign policy guidelines since Bandung conference held in Indonesia in 1955. Panchsheel embeds principles of mutual respect for each other’s territorial integrity and sovereignty, mutual non-aggression, mutual non-interference in each other’s internal affairs, equality and mutual benefit, and peaceful co-existence. (The Kathmandu Post, 2017)

Nepal is a relatively small country concerning of its geographical size, military capacity and economic prosperity. It has two giant neighbour countries - India (in south, east and west) and China (in north). The foreign policy of Nepal is mainly focused on maintaining close and friendly relations with these two countries. Nepal has established diplomatic relations with more than one hundred and fifty countries (Ministry of Foreign Affairs). Despite being pursuing Panchsheel principles, Non-alignment is a harmonious strategy for sovereignty of Nepal. The main motto would be amity with all and enmity with none.

Component 2 – ‘Self-reliant by reducing brain drain’

Brain drain has two consequences: positive and negative. Return of human capital, skill, technology and advanced education to home country is positive consequence whereas loss of skilled professionals who are immigrated to other countries causes negative impacts in the society.

The main reasons behind brain drain in Nepal are lack of job opportunities, political instability and low salary. Others are poor quality education, lack of proper working environment, corruption, nepotism and favouritism in job recruiting process. According to Nepal Rastra Bank, Nepal’s trade deficit has ballooned to 1.32 trillion rupees in FY 2018/19 from 689.37 billion rupees in FY 2015/16 in four year’s span. Annually, import is approximately four times increasing in comparison to export. (Khanal, 2019)

The government has to promote labour mobilization, mechanization and modernization especially for agriculture, livestock and fowl sectors backed by policy support.

Component 3 – ‘Government should formulate fundamental policies by incorporating human dignity and respect’

According to Foreign Employment Board data, a total of 7,467 Nepalese people have died in foreign shores since last 11 years. An average of two men and/or women is dying every day. In this regard, GoN is dealing with 15–20 deaths every month. The deaths are caused due to cardiac arrest, heart attack, murder, natural death, suicide, traffic accident, work place accident and other unidentified sudden illness (Mandal, 2020). It is contentious issue that young people are dying in and around 35 year-old- ages. Nepalese migrant worker’s death compensation is delayed or postponed (Mandal, 2020). There is no data available of migrant workers who died in India due to open boarder policy. The international norms like ‘eight hours’ work, eight hours’ rest and eight hours’ entertainment’, no work no pay, and fair pay would have to be followed for betterment of all workers.

4.4 ECONOMIC ASPECTS OF NEPAL

Questions	Component	
	1	2
EC8 The fruitful and balanced foreign policies should be adopted for healthy mutual relations and attract FDI from other countries, especially from India and China.	.787	
EC9 For entrepreneurship enhancing, policies should be adopted that easily access to capital with or without collateral.	.721	
EC5 The major economic indicators have to be evaluated, improved and focused for SD.	.700	
EC7 The needful efforts have to be put forth to infuse domestic and foreign capital for SD of Nepal.	.680	
EC4 The stringent actions and programmes have to be monitored for accelerating economic development.	.658	
EC10 The most promising agro-technologies have to be effectively shared and implemented for SD.	.610	
EC1 Slacking in employment generation is prime barrier to development.	.533	
EC2 Industrialization should be enhanced to uplift on the development ladder.		.833
EC3 Subsistence farming has to be shifted to commercial farming through modern technological innovations and applications.		.828
EC6 The unexplored and untapped natural resources can be extracted and used for manufacturing industry and/or other.		.474

Table Five: Computation of Rotated Component Matrix in SPSS: Group Four

a. Rotation converged in 3 iterations.

The table has showed that FA has identified two constructs or components. If it is assumed that the value equal and above 0.700 is considered as baseline for question selection then the questions are fallen under first component (EC8, EC9 and EC5) and second component (EC2 and EC3). The respective component questions are extracted by considering the underlying traits:

Component 1 – ‘Attract FDI for entrepreneurship enhancing and economic indicators improving’

Foreign investors from 39 countries have made investment in 252 firms in Nepal. The FDI stock reached Rs. 137.7 billion (6.1 per cent of GDP) in 2015/16. The services sector accounts for highest share (70.2 per cent) of outstanding FDI in Nepal. In terms of paid up capital, highest FDI in Nepal is from India. West Indies happens to be major source region with FDI of Rs. 62.8 billion as of mid-July 2016 (Nepal Rastra Bank Research Department). History of enterprise in Nepal goes back to 1925 AD when first private enterprise was registered. In that time, Michigan University had already launched its first entrepreneurship course (Jha, 2016). Natural resources are running out without tapping. Similarly, youth forces are abundant but policy is not framed effectively for utilizing their achieved skills and innovative ideas. Briefly, GoN needs to formulate pragmatic policy and would have played pivotal role for foreign and domestic investors.

Component 2 – ‘Industrialization brings employment that accelerates development’

The history shows that Nepalese industrial development is in infancy stage. In 1936, Biratnagar Jute Mills was established as first joint-venture industry after formulation of Nepal Companies Act. During the 1950s and 60s, government-owned industries were established few in numbers, mostly with support of China and the then USSR.

Nepal has an unconventional economic growth pattern overviewed by international organisations. But it is fertile ground for industry establishments by considering demographic dividends and low wage workers. The service sector is prime contributor to economy with approximately 57 per cent followed by agriculture and industry with 27 per cent and 16 per cent respectively (KC, 2019).

In adverse situation like global recession, pandemic, political agitation and cold war or even war, Nepalese economy would not be able to sustain the sudden influx of labour. Thus, GoN would have to amend laws and formulate compatible policy to achieve ambitious target of becoming a middle-income country by 2030 (KC, 2019).

4.5 Group Five: Environmental Aspects of Nepal

Questions	Component	
	1	2
EN4 Natural hazards like floods, landslides, earthquakes, droughts have to be reduced through disaster preparedness programmes for SD of Nepal.	.860	
EN2 Clean water is associated with health and longevity of people, reflect in the SD.	.767	
EN6 Garbage recycling mechanism should be established instead of open burning and decomposing it.	.611	
EN7 Extraction of sand and boulders from rivers should be stopped for ecological concerns.	.602	
EN8 The rising environmental temperature has to be monitored by reducing air polluting activities for SD.	.554	.531
EN3 Ambient air is marred by unethical human/organisation related activities.	.533	
EN5 The reason behind environmental degradation is deforestation.		.792
EN1 Pollution aroused by road construction without dust control mechanism and carbon dioxide emission by combusting fuels (especially by vehicles) are the major cause of human illness (minor or chronic) and other airborne diseases.		.752
EN9 Environmental consequences can be seen and evaluated in ozone layer depletion, green house effects, glacier melting, global warming, and climate change.	.486	.542

Table 6: Computation of Rotated Component Matrix in SPSS: Group Five

Rotation converged in 3 iterations.

The table shows that FA has identified two constructs or components. Two questions EN8 and EN9 have cross loadings between component 1 and 2. It means there is a problem in question measuring and creates complication in interpretation. If it is assumed that value equal and above 0.600 is considered as baseline for question selection then questions are fallen under first component (EN4, EN2, EN6 and EN7) and second component (EN5 and EN1). Each component questions are clubbed by considering the underlying traits:

Component 1 – ‘Disaster preparedness programme for natural calamities, clean water for health, garbage recycling and stopping the extraction of sand and boulders from rivers’

The reasons behind natural disasters of Nepal are complex geology, variable climatic condition, active tectonic processes, high angle of slopes, unplanned settlement, population increasing in alarming rate, poor economic condition, low literacy rate, and so on. In Nepal, past major natural disasters could be pointed as earthquake, flood, landslide and debris flow, fire, epidemic, avalanche, glacier lake outburst flood, windstorm, thunder bolt and hailstorm, and drought.

Nepal is ranked at twentieth position in world in terms of people affected by floods every year. The 75 per cent disasters are happened due to floods and landslides (Disaster Management Reference Handbook - Nepal, 2020). The southern regions of Nepal consist of low-lying plains and rivers originating from mountains which contribute to annual flooding. GoN has established a National Disaster Risk Reduction Management Authority (NDRRMA) under Ministry of Home Affairs (MoHA) which is one of leading ongoing efforts to operationalize the policies, practices, and initiatives at local, federal, national, regional, and global contexts.

Component 2 – ‘Environmental degradation due to deforestation and health hazards due to air pollution’

Nepal has abundant natural resources: primarily in water and secondly in forests. Forest coverage is highest in mid-hill followed by high mountains and Siwaliks whereas Terai (plain land) has least but high productive forest in Nepal. Some 35 major forest types occur in Nepal (Food and Agriculture Organization). During the period of 1966 to 1986, forest area was declined considerably from 45 per cent to 37 per cent (Chaudhary, Uprety, & Rimal, 2016). Somehow, community forestry has taken steps for protection and plantation. Some identified causes of deforestation in Nepal can be pointed as population growth, wood for cooking, migration and settlement in Terai, many animals on limited grazing land, forest fires, fodder, illegal timber harvesting and trade, unplanned developmental activities in tourism and trekking, cultural use of wood, infrastructure development, hydropower plant construction, high tension electrical transmission, irrigation canals, collection of medicinal plants, trees cutting and falling, poverty, low level public awareness, animal poaching, factory’s unscientific waste disposals, and so on.

The prime reasons are overgrazing of cattle and unorganized fodder production and pasture management (Paudel & Tiwari). Karkee (1991) found that 40 per cent of forest fires in Mid-hills are occurred by accident and 60 per cent by deliberately (Chhetri & Shakya).

The consequences of deforestation can be summarized as fuel scarcity, reduction in fodder supply and leaf-litter manure, soil erosion, landslides, lowland flooding, decrease in forest medicinal herbs and shrubs, effect on tourism, and wetland degradation. GoN would encourage through policy framing and participation of stakeholders to conserve and protect forest through plantation and afforestation programmes. The subject of deforestation is highlighted in SDG 15, Target 15.2 and Indicator 15.2.1. Air pollution is linked to energy, climate, trade, transport, agriculture, biodiversity and other environmental factors (Stavropoulou, Stavropoulos, & Bezirtzoglou, 2020). Manufacturing and construction industries, vehicle emissions, and open waste burning are the major contributors to poor air quality. The cities like Kathmandu (rank most polluted), Lumbini, Nepalgunj, Bhairahawa, and Chitwan are consistently high levels of air pollution. Similarly, the rural areas are also affected by air pollution due to muddy and dusty gravel roads. Generally, it is found that poor air quality has two effects on human life: short term and long term. Short term effects include itchy eyes, nose and throat, coughing, shortness of breath, headaches, and upper respiratory infections (bronchitis and pneumonia). Long term effects can be seen as lung cancer, cardiovascular disease, chronic respiratory illness, and heart attacks, and strokes. Presently, these diseases and symptoms are noticeably increasing.

Mitigating these consequences, WHO has recommended air quality guideline that fine particulate matter (PM_{2.5}) should be 10µg/m³ annual mean and 25µg/m³ twenty-four hour mean and coarse particulate matter (PM₁₀) should be 20µg/m³ annual mean and 50µg/m³ twenty-four hour mean (WHO, 2018). Air pollution can be mitigated through management of solid waste (prohibiting open burning and separating for composting, biogas, recycling, and reusing), transport (improving public vehicles, promoting electric vehicles, expanding sidewalks and motor bike lanes, developing green parks and walking corridors and shifting in mobility), industry/brick kilns (modernizing with new technologies, sifted to open, remote and flood free plain land, reducing child labour, providing health insurance and safety equipment and non-slippery work place) and energy for households (providing cleaner fuels for cooking like LPG and electricity). Now, Environmental Act 2076 (2019) is prevailing in Nepal. Lastly, air pollution has been a burning issue but air quality monitoring stations are in limited places only like Kathmandu, Kavre, Pokhara, Chitwan, and Rupendehi (Government of Nepal). Thus, SD is concerned with air quality mainly in its three goals i.e. Goal 3, 11 and 12.

5. CONCLUSIONS

SD is a popular global concept which has been adopted by GoN for the prosperity of the country. All seventeen SDGs need to be given equal weightage by GoN to graduate to upper level development category. SD necessitates broad discussions and consultations among concerned stakeholders for increasing awareness in people and for rightful development practices. SD indicators or parameters would have to be focused on people's happiness, prosperity and overall growth of the country at large. SDGs would be aligned with national objectives for garnering development fruits. SD progress would be monitored through separate expertise committee/body. There would be lacking in proper planning and execution of development activities and political commitments as well. Nepal would be always behind in development unless and until utilize its highest potential natural and human resources optimally and rationally. Last but not least, history, political and anthropological aspects are beyond the domain of this study. Only relevant English published articles are considered as study materials. This research paper is not an attempt to provide the capsule for SD of Nepal. So, the more insightful studies are needed on the burning issues of SD.

ACKNOWLEDGEMENT

I would like to express my profound gratitude to one of my joint research supervisors - Prof. Harsh Purohit, Dean, FMS – WISDOM, Banasthali Vidyapith, Rajasthan, India for his encouragement, guidance, and suggestions for this research article. I acknowledge publisher for getting space in this renowned journal.

CONFLICT OF INTERESTS

The author declares no conflict of interests with none of stakeholders regarding this article.

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