ANALYTIC HIERARCHY PROCESS FOR DEVELOPMENT DECISIONS: PROSPECTS AND PROGRESS IN NEPAL

Shashi Bhattarai
Chief, South Asian Development Fund (SADF) Secretariat
NIDC Building, Durbar Marg, Kathmandu, Nepal
shashi@icon.com.np

Abstract

Keywords: Development Decision Making, Sustainable Development, Governance, Nepal

Summary: *A need of strong decision making tool and appropriateness of AHP in development decisions in developing countries is highlighted. AHP application in development governance analysis, comparison of ranking of hydropower projects, suitability for urban water supply and drainage option assessment in Nepalese context are main features of the paper. And AHP promotion in developing world to apply it in real life development decision has been sought.*

1 Introduction

Development decisions are increasingly becoming complex task. Constituency of professionals in development and interest groups with conflicting objectives are broadening. At the same time, information and communication technologies are enabling to generate broad spectrum of decision variables. Proper handlings of socio-cultural aspirations and values, equity, transparency and sustainability are critical success activities in a development process. Therefore, integrated approaches in development decisions are needed, especially to address cross cutting issues in water and sanitation, energy, agriculture, health, education, micro-credit, empowering women and marginalized group. Poverty alleviation interventions have perceived lack of proper decision making approach to demonstrate good governance.

Nepal is small economy country with poverty focused activities are being implemented. There is a flux of lending agencies with varied interest area to support as well as there are multiple agencies involved in a single sector. Prioritization, ranking, equity, allocation, distribution, transparency, trade-off, governance, participatory process, informed decision making, consensus building and conflict resolution are commonly used term in development dossier. Development professionals view that social factors including cross-cutting issues are equally important and put in the top of their discussion agenda. Slow decision making has been increasingly a key issue to impede development projects implementation. Matching the local to central and central to local, development decision making needs two way approach, bottom-up as well as top-down. External factors, central governments policy and technical condition to be matched with the grass root requirements, served as bottom up inputs in the development planning and decision making process.

Prioritization of projects and programs are the main issue in Nepal. Every development partners lobby for projects and programs they supported. In this case, government faces difficulties to justify their decisions. This shows governments' lack of capacity to address multiple criteria decision problem and awareness on application of available Multi Criteria Decision Making (MCDM) tools. This also implies to international consultants working in Nepal under the development project supported by development partners. Development projects currently being implemented are still using classical optimization and weak ranking tools.

Observing the need of decision making tools in development, the paper discusses on application of AHP and its appropriateness in development decision analysis in Nepal. Lack of awareness on availability of powerful multi criteria development decision making tool like AHP among development consultants is illustrated.

2 Application of AHP for Development Decisions in Nepal

There are four cases of application and one case of appropriateness of AHP application are discussed in the paper. The first case presented is to demonstrate the possibility of AHP application for development governance analysis, taking an example of hydropower development in Nepal. In the second case, ranking of hydropower projects in Nepal is compared with AHP. The ranking work compared with The World Bank financed Medium Scale Hydropower Development Project (MHSP), which was conducted by international consultant. In the third case, drainage development project options assessment conducted by local consultant is briefed, where the author worked as Multi-Criteria Analyst and used AHP. The fourth case briefs an academic exercise to analyze industrial location in Nepal. Finally, fifth case is on recently completed component of Melamchi Water Supply Project. In which, requirement of Multi Criteria Analysis (MCA) tool and appropriateness of AHP is discussed to meet the project objective.

3 Observations from Cases of AHP Application

The first cases discussed on the on the paper found that the AHP is an appropriate tool for development governance analysis. The approach of application of tool in governance analysis is new, even having its high usefulness in the public involvement in decision-making, transparently resolving conflicts.

On the second case, an attempt to evaluate work on ranking of hydropower projects by Medium Hydropower Study Project (MHSP) in Nepal is made with the use of AHP. It is observed that the approach of using AHP could handle all the factors in a single decision framework and generate ranking of projects. The method of derivation of weight used by the MHSP to the factors and sub-factors is also observed to be critical part, because the ranking of alternatives were very sensitive to the weights.

In the third case of drainage development option assessment, the AHP based decision analysis resulted numerous insights into the sensitiveness of various stakeholders towards the drainage development preference. Use of AHP in the project confirmed that AHP is a very affordable and judgment based methodology.

In another case discussed, industrial location analysis in Nepal utilizing AHP concluded that the most appropriate location reduces the sign of urban stresses faced by the cities and also found to be a consensus option, as private industrialists are setting up their industrial parks at the area identified appropriate by the research.

The final case discussed on the paper, observed that the Optimizing Water Use in Kathmandu Valley (OWUKV) project should look for an appropriate Multi Criteria Analysis (MCA) tool, for deciding consensus options, especially for the period of without Melamchi Water Supply Project in Kathmandu valley, the capital city of Nepal. AHP based MCA for evaluating the urban water supply options is observed to be the most appropriate and recommended the same.

4 Conclusion

Appropriate decision making in development is observed to be the critical need for developing countries like Nepal. Development workers are unaware about the availability of powerful and appropriate tool for development decision making including AHP. It is observed that, in practice, use of any other powerful multi criteria decision making tool is not present. Henceforth, author recommends that there is a strong need to promote AHP among international and domestic consultants, at the same time there is need for creating awareness among development practitioner and governments of developing countries on availability of such a powerful and relevant tool for development decision analysis.