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Multi Criteria Project Evaluation and Prosperous Africa

By Getachew Teklemariam

Development is a multi-faceted agenda where intricate web of relationships exist between the economic, social, cultural and environmental elements demanding a thoughtful synchronization to its realization. In keeping the balance between the varying elements, human decision-making will have a lot to put forward. Had the decision been made taking into account every bit of the system as significant, a balance may be maintained while the development could be healthy. But if the decision had looked over any single unit, then the consequences might be as huge as economic collapse, disharmonization of society and irreversible environmental damage.

Development decision-making would be made at different levels of planning and implementation of development interventions. Ranging from policy level decisions; which are broad, comprehensive, managerial, mostly politically-motivated and costly, to project level decisions; which are detailed, technical, issue-based, and less costly, decisions are undertaken at different junctures of the pyramid. Aside some commonalties, the level at which a given decision is made would have a detrimental effect on both the essentials to be comprised in the decision process and the consequences thereof. In going up the pyramid from project planning and implementation to policy planning and implementation, scope and impact of the decision process would get more extensive.

In development decision process, the human factor plays significant role. Stretching from the project sponsor to the policy formulator, subjective elements of the decision process are always a challenge to compromise. Circumscribed within the aim of optimizing benefits, decision-making is always subject to critics. Yet, decision aids have helped to minimize these critics by reducing subjectivity, standardizing preferences and making tradeoffs. With this aim, different types of decision aid tools have been developed ranging from single-criterion decision aid tools to those with multi-criteria basis. From the point of view of the decision maker, the purpose of decision aid tools is *to reduce the plethora of alternative solutions for a multi-dimensional problem to one solution.*

With the growing complexity of problems, it has become indisputable to demand a decision aid tool capable of considering a large variety of criterias with less biases and distributional problems. Due to its capability to act as an interactive learning procedure amenable to capturing the complexity of natural systems, Multi Criteria Project Evaluation (MCPE) has become popular. In its over 30 years of application it has undergone impressive development in handling multiple

evaluation axes. Most significantly, participation and transparency axes have been operationalized in decision-making through MCPE.

Projects ranging from roads, bridges, telecommunication, water supply and sanitation, irrigation, energy supply, airport expansion, watershed management, to environmental protection have been evaluated using MCPE with transparent participation of stakeholders in different geographic locations. Diversity, conflicts (raising from conflicting interests), inefficient political systems, lack of citizen participation in decision making, lack of transparent decision framework, scarcity of capital, highly hierarchical organizational structure, and lack of well trained project professionals being the typical characteristics of African public sector, what will MCPE's legacy towards a better, united and developed Africa be?

MCPE: Is it really classy?

Multi Criteria Project Evaluation could simply be defined as set of project evaluation methodologies, which use multiple criteria to rank alternative projects solutions in an aim to achieve multiple targets. Basically, MCPE has three core elements. These are the problem needed to be solved, the alternative solutions and the set of criteria against which all the alternatives will be evaluated. In addition, it do involve other three factors; Decisions maker/stakeholder, uncertainty and environment.

Traditionally, alternative project solutions have been preferentially selected based on benefit-cost comparison, as it is the only deductive and explicit way of persuading project sponsors. But as business environments evolve to be wider, complex and interdependent empires, a mere benefit-cost comparison fails to be comprehensive enough to include the interests of all stakeholders.

In what aspects do MCPE vary from the traditional cost-benefit comparison? Leaving the detail aside, the benefit-cost comparison method tries to convert all costs and benefits into exclusive monetary values and use efficiency criteria (like NPV, IRR, B/C) to measure how much efficient is an alternative project solution. In contrary, MCPE comprises multiple criteria, in fact including efficiency criteria, to measure the feasibility of a given project solution. While the former relies heavily on quantitative data, the latter use both quantitative and qualitative data as sources of verification. In case of the former, the financial equivalents of criteria are expertise imposed, while in the latter case, they are outputs of the decision analysis.

Away from the mentioned legacies, MCPE do facilitate transparency, smooth communication, participation, interactive learning, structural flexibility and thoughtful decisions making.

The methodologies of MCPE do vary on the basis of theoretical background, fundamental assumptions, and procedural aspects (I will discuss the detail other time). Yet, almost all of MCPE methodologies share the same steps. These are

- ✓ Identifying the project problem
- ✓ Identifying alternative project solutions
- ✓ Identifying measuring criteria
- ✓ Measuring alternative project solutions against criteria
- ✓ Weighting the scores
- ✓ Evaluating the performance of alternative project solutions
- ✓ Ranking project solutions and drawing recommendations

MCPE is being used in making decisions at various levels of strategic planning and projects management. The Nepal hydropower project (1996-1998), Greece Bio-electricity project (2005), south Netherlands airport expansion project (2005), and Switzerland Monte Varita road project (2003) could be mentioned as typical projects that used MCPE in project management.

With its essence of incorporating as many aspects of the project context as possible in decisions making, MCPE is more comprehensive than any decision aid tool. Besides, by enhancing participation and transparency it will ensure a better integration in projects. As it could be used at different stages of the project life cycle (screening, preparation, appraisal and post-implementation evaluation), it is a good playmaker in project management.

After all, it could be designed in a cost-effective and less-time consuming way. This will make it an appropriate decision aid tool in places like Africa, where project financial resources are scare. Then, isn't MCPE really classy? I think so!

What is in it for Africa?

Africa-the second largest and most populous continent in the world. Africa-the origin of human beingS. Africa-a land of abundant natural resources. Africa-the land of diversity. Paradoxically, Africa-the land of poverty, disease, illiteracy, malnutrition, drought, conflicts, and dictatorship.

Africa is a continent where development decision-making is less transparent and less participatory. Citizens have little/no say on development decisions, which will directly affect them. In most of the cases, if the "big guys" say so, everything will go ahead. The saddening fact is that, these "big guys" do not

have the training, skill and interest in the things that they rule over. I don't think that they even have know-how about the fact that, they are deciding on our very survival, and our little treasure of hope.

Lately, in most of African countries development interventions start from medium-term development plans. Don't ask me who is behind this, and how much are these plans a reflection of the peoples' dire need. Following this, sectoral development programme packages will be prepared comprising as many projects as possible in it. But, keep in mind that the priority area selection, in most cases, will be made politically. Then will come project prioritization, planning, appraisal, evaluation and post-implementation evaluation, which are currently being undertaken in financially biased way.

Even in the case of public sector projects, which do have multi-dimensional impacts, the evaluation criteria being used at the different stages mentioned above are heavily quantitative and financially biased. How will, Africa, then realize economic growth, food self-sufficiency, poverty reduction, cultural harmony, sectoral interdependence, and spatial integration, in a condition where financial and physical performance are being used as the dominant indicators to evaluate projects?

How would we achieve integrated development if we fail to measure our project solutions against social, institutional, cultural, environmental, gender, and esthetic values?

How would our current economic growth be changed into economic development without putting participatory and transparent project evaluation frameworks?

When will Africa witness horizontal and vertical integration in her development projects?

When will the different administrative units of all African countries communicate clearly, reach at consensus on project solutions and work in harmony towards success?

When will African decision makers try to see out of the box of traditional benefit-cost comparison, and donor-oriented financially biased project evaluation, to more comprehensive decision aid tools?

As to me, if we, Africans, wish to see a better, united and prosperous Africa, our decision aid tools shall transcend sectoral issues. They shall be able to address our multi-faceted problems. Hence MCPE is a necessity, not a luxury, for prosperous Africa.

I would be glad to hear comments on the issue from Africans, friends of Africa, and all project professionals. Drop me a line on getdem2006@yahoo or getupfront@gmail.com. Wish you all the best in your project activities!

About the Author



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