



Research Article

PRIORITIZATION FOR MONITORING AND EVALUATION (PME) OF AGRIBUSINESS PROJECTS

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Abstract: Agribusiness is the key for sustainable development in agriculture. The growth of both agriculture growth and industrialization can be achieved from Agribusiness enterprises alone. Agriculture continues to support numerous downstream linkages with industry by becoming a supplier of vital industrial raw material. Due to higher dependency on agriculture country such as India will be always associated potential economic growth for Food processing Industry, which will establish better linkages between end user and agriculture. Government also has accorded a high priority to the sector and has provided many fiscal incentives.

Keywords: Agribusiness, Food processing Industry

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Introduction

The world's agriculture production bestowed with varying different climatic zones especially in India, which is producing greater share of agricultural products such as cereals, pulses, vegetables and pulses to name a few and this is coupled with change in food habits, demographic patterns and also increase in income level, all these factors collectively boost the dynamic opportunities in agriculture sector, especially in Agri-business industry. India offers a huge potential in terms of rising consumption and as a sourcing hub for the world due to its supply strength. If we look only into the India's Food Processing Industry is estimated to be around USD 67 billion of the USD 180 billion Food Industry and creates more employment opportunities per unit investment than any other sector alone. This shows the importance of this sector in agriculture development. In order to promote this sector both at macro and micro levels of production units, it is important to evaluate its performance of the business. Consequently, monitoring and evaluation of agribusiness projects has very much need of an hour in the present scenario at both institutional and global markets. Thus, the primary rationale for the agribusiness project evaluation studies and priority setting principles is to provide information for making decision on both prioritization and resource allocation. Further, it has to undergo continuous Monitoring and Evaluation system, which helps in indicating the path of progress of the project through the project implementation process and puts the project on right track by facilitating timely corrective measures, while the evaluation system provides information on whether the project has achieved the objectives and in timely fashion, cost effective way, and through right route. This also provides better alternative routes to reach the same destination in a more cost-effective manner. The process of priority setting starts by addressing three basic considerations in general especially in agribusiness they are: Links with Planning, Participation, and Inputs. Each of these considerations is explored below.

1. Links with Planning: The design and implementation of a priority setting exercise will have to be adapted to the type of plan that it supports. Priorities need to be established because research planning always confronts a scarcity of human and financial resources, be it when designing a national research plan, institute plans or program plans. A national priority setting exercise is part of planning for long-term research system development; it should not be conducted

more frequently than every 10 years. Priority setting for an institute is part of strategic or corporate planning exercises and should be done every 5 to 10 years. Priority setting to support planning activities at program level is conducted for every 3 to 5 years.

2. Participation: A participatory approach to priority setting leads to better decisions and enhances their chances of successful implementation. The main interested parties should be represented in the priority setting exercise. Wide stakeholder and client representation is very important but not easy to organize. For some client groups, such as resource-poor farmers, it is a particular challenge to identify persons who can validly represent the group's research needs.

3. Time and Information on inputs: A crucial question for the design of an appropriate priority setting process is: how much time and money (for materials, information and purchased time) to invest. Some broad guidelines exist which may help make such decisions. Part of this question is the actual ability to find the desired time, money and information.

Once the links with planning, the participating groups and the available inputs are established, the priority setting exercise can be implemented. This is done through four Steps. The capacity to design and implement priority setting exercises needs to be developed like that any other area of research. The steps are as follows

Steps in Priority Setting in Agri-business Projects:

Priority setting is most effectively organized in a stepwise manner. By following these below mentioned four steps we must make sure that we should arrive at the best decisions, in the best manner(9). It also reduces the chance of being confronted at the end with omissions that invalidate the exercise.

Step 1: Choosing the right people.

Step 2: Defining objectives and options- Defining research objectives, research alternatives and setting criteria.

Step 3: Choosing and evaluating- Choosing and applying a measurement methods like sensitivity analysis.

Step 4: Preparing for implementation- Validation and preparing for implementation After proper implementation of agribusiness projects, further step is to identify and measure the economic benefits derived from specific agribusiness projects.

In particular, the major rationale for any allocation of research resources should be the potential contribution to productivity growth, and economic data which is needed to analyze this contribution are usually not explicitly considered. As a result, research resource allocation decisions tend to be based on historical precedent and may not take account of rapidly changing demands for both the commodity and type of technology. Therefore we have to identify certain parameters which determine the economic benefits, they are as mentioned below. Five key parameters determining the economic benefits of Agribusiness Research Projects:

- The expected increase in productivity per unit (per ha, tonne or animal,) if the Agribusiness Research is successful;
- The probability of success of the Agribusiness Research;
- The number and value of units (ha, tonnes, or animals) for which the Agribusiness Research can potentially be applied;
- The expected adoption path; and
- The cost of the Agribusiness Research

At the Micro and Macro level, priority setting involves decisions about allocation of resources across at different levels.

- a. Focusing on Agribusiness Research problem areas like value chains/supply chains, specific logistics, and operational management.
- b. Efficient allocation of resources across agro-ecological zones.
- c. For each Agribusiness Research problem area and agro-ecological zone, selection of specific projects for funding.

Micro-Level Priority Setting Approaches: There are two approaches to micro level priority setting namely, a) Prioritization of agribusiness projects and b) Prioritization of production constraints and then formulating projects. In the first approach, the agribusiness projects are formulated based on the identified field problems. The contribution of these projects to research objectives is measured through criteria selected for prioritization [4]. The criteria may be purely economic and non-economic or both depending on objective. The information collected on these criteria is used as input in following techniques to rank the projects.

- Checklist and weighted scoring model
- Cost benefit analysis
- Mathematical programming
- Simulation models

In the second approach, prioritization is done at every level of production constraints before formulating the agribusiness projects. The basis for prioritization is mainly due to the magnitude of production or income loss. The projects are formulated only on production constraints ranked highest after doing proper root-cause analysis. There two methods to calculate magnitude of production losses, they are Yield gap analysis and Estimated value of production loss. The selection of any particular method or methods for prioritization depends upon the time, skill and resources. The methods like Checklist and Scoring Methods, Value of production loss, Yield gap analysis, Cost-Benefit Analysis, Mathematical Programming and Simulation range on the scale from low to high. The methods on lateral side require more resources and advance knowledge of economic and statistical methods in comparison to former methods but certainly at the cost of precision and significance of results. Though in some situations use of advance methods is unavoidable but Weighted Scoring Model has been considered the most comprehensive method for micro-level priority setting.

Significance of Micro-level Priority Setting

The macro- and micro-levels of priority settings differ not only in levels of priority and methods used in allocation of resources but also in amount of control that can be exercised and the amount of work involved [3]. At macro-level, priorities are determined through highly complex politico-economics considerations and there is little control over allocation of funds among commodities and production systems or states. Micro level priority setting is the prioritization of agribusiness projects and programs done by the scientist or research manager in State Universities and Research Institutes working at production system level or agro-ecological zone level. There production constraints are ranked on the basis of economic importance, urgency and other criteria contributing to research objectives. The information required to set micro-level priorities is collected directly from farmer

fields, markets and institutions related with production and distribution. At the same time, Scientists have wider discretionary horizon in the absence of any force to deter scientific temper to prioritize using scientific principles. Thus making micro-level priority setting as major area of work on two accounts- largely primary data in required and set on scientific principles. It is important that agricultural policies and agribusiness resources should be based at least in part on comparative advantages and scientific considerations. Macro level priority setting in agribusiness projects are highly sensitive to parameters changing at the national and international level like price, cost, etc. The micro-level priorities are based on production constraints or need of the farmer and are more stable to be followed with greater confidence. In the prevailing circumstances, for majority of the research organizations, the funds are mostly 'given' to be spent on a commodity, research institute and agro-ecological situation and they are left out only to allocate it among research projects and programs on the basis of their priorities at micro level priority setting. The micro-level priority setting requires huge resources in terms of cost, time and manpower because domain of data collection is widespread and the magnitude of production constraints and research projects to be prioritized is large in number and complex. It is based on need of the stakeholders and field problems and hence requires multidisciplinary approach and greater involvement of farmers. It has also been observed that in case of 20 percent of the project proposals are only based on problems identified on the farmers' field. The rest of the project taken by the scientist are either extension of their doctoral research or guidance of seniors or based on trend in the research journals or for the purpose of publication. To make the agribusiness projects need based it is imperative to go for micro-level priority setting.

Priority setting by Agribusiness Projects problem areas

Indian Agribusiness is prominent for their long and fragmented supply chains. The inefficiencies' in supply chain can lead to huge loss due to wastage or shrinkage of perishable commodities. Further, in India post-harvest losses of perishables commodities accounted for 30-40 per cent. The entire supply chain is dominated by unorganized players and absence of priority setting structures which can ensure correct price discovery and availability of consistent quality produce. Therefore, these issues are to be prioritized in projects, they are as follows.

- Supply chain, storage and processing loss studies have often formed the basis for priority setting across problem areas – for example, the amount of resources that should be allocated to different pests may be guided by the relative yield losses to each pest.
- This approach has been most widely used in rice Agribusiness Research in Asia (2) but is also used more generally in setting priorities for varietal improvement. In spite of higher revenue from exports, India share in global food trade is only 1.5 percent. The huge loss across the various food chain and value chain and also processing levels are creating a barrier for the growth of agribusiness in India. The absence of processing and storage of fruits and vegetables results in huge wastage estimated at about 35 per cent which approximately accounts for Rs.33, 000 Crores annually.

Three approaches on estimation of food chain losses:

1. Estimates of supply chain losses from controlled experiments by comparing yields in protected and unprotected plots. The major limitation of this approach is the cost of experimentation and the difficulty of extrapolating results across time and space.
2. Farmers' estimates of supply chain losses. These have the advantage of representing real farm situations. However, for some types of losses, farmers' subjective measurement may be misleading since losses may be non-obvious or losses may be overestimated. Farmers typically give high weight to recent catastrophic events even if they are rare events.
3. Estimates by Agribusiness Research and extension workers by random inspection of fields in a given area. Specialists for a given pest will likely be in the best position to estimate losses of that pest and with training; extension workers can also provide reasonable estimates.

In some cases, subjective estimates may be supplemented by objective measurement (e.g., weed density) that can be correlated with yield losses. On the other hand, scientists may not recognize problems as perceived by farmers.

- Supply chain losses, of course, provide only the potential gains from Agribusiness Research on different problem areas.
- Therefore, to be effectively used in priority setting across problem areas, supply chain loss estimates should be combined with estimates of the cost of Agribusiness Research to resolve the problem, the probability of success and the extent that the supply chain and processing loss will be reduced by the Agribusiness Research programme. In practice, such estimates can be elicited through well-designed questionnaires to specialists in the problem area or through collective judgments of scientists in small workshop settings (e.g., the Delphi method).
- Historical data on Agribusiness project progress is overcoming particular yield-limiting factors, which can also often be a good basis for projecting ex ante Agribusiness project benefits.

Even when costs and likely payoffs to Agribusiness projects are included, there are number of limitations to using supply chain, process and storages loss studies in setting Agribusiness priorities. In particular, food chain losses are only one source of potential productivity gains.

Priority-Setting Processes

Participatory Approaches

Success in Agribusiness project planning and priority setting depends at least as much on the processes used in arriving at priorities as on the specific choice of analytical methods. The General steps to be followed by Institutional processes for Agribusiness Project planning, they are;

- Assessment of the external environment
- Assessment of the current status of the organization
- Projection of desired future state of the organization
- Analysis of the gap between existing and desired state
- Determination of a strategy to close the gap
- Formulation of an action plan
- Implementation of the action plan
- Monitoring and evaluation of implementation and outcomes
- Adjustment to appropriate action and strategy plan [1].

A participatory approach to these steps that involves both other scientists as well as major beneficiaries and other stakeholders ensures not only the incorporation of relevant information and skills, but also helps build commitment to the final Agribusiness project plan.

Participatory processes involving scientists

Priority setting is not an economist's job. It is best carried out through the participation of scientists at two levels.

- First, a small task force of scientists working in the Agribusiness projects which are of personnel interest should be charged with the job of leading the priority setting, rather than relying on a special planning unit to undertake the analysis.
- Second, the task force may call on a wide range of other scientists to provide information and estimates for specific parameters.

In some cases, this can be done through small workshops and in others through written questionnaires. Participation of scientists can be facilitated by the use of methods such as the development of problem-cause diagrams and the ZOPP procedure developed by GTZ. The process needs to be iterative as parameter estimates are continually refined.

Participatory processes involving beneficiaries

Major stakeholders should be involved as full partners at each step in the process in order to increase the quality of information used, develop strategy, and to build political support for the strategy [5]. The major stakeholders are the expected beneficiaries of the Agribusiness project, but others such as policy makers,

processors, and environmental groups may also be represented. Stakeholders may be involved either passive or active approach.

Passive Approach

In this approach typified by the diagnostic survey, stakeholders are consulted in problem identification and screening of potential solutions. Diagnostic surveys can be widely used to set priorities at the project level and provide an invaluable source of information in the priority-setting process.

Active Approach

This approach is increasingly, more active processes tried in which stakeholders not only provide information but also are engaged in decision making on Agribusiness project priorities. Farmers can be invited, for example, to be part of the priority-setting task force, or workshops can be held in which major stakeholders, such as representatives of farmer organizations are asked to make recommendations on Agribusiness project priorities. The Regional meetings of the Indian Council of Agricultural Agribusiness Research are taking step in this direction. The Agribusiness Research Corporations in Australia have also developed strategic plans for Agribusiness Research based on involvement of a wide range of representatives of the industry and extensive consultations with other concerned groups. In participatory approach, priority setting is put entirely in the hands of major stakeholders. For example, the task force to undertake strategic planning for the Michigan apple industry was made up of representatives of the industry, including producers, processors, transporters and consumers (6). The task force with the participation of a facilitator from the Agribusiness Research system had full responsibility for developing the strategic plan and its implementation. Such user empowerment is best undertaken in association with user funding of Agribusiness projects.

Focus on Institutionalization Issues in Agribusiness Projects

Although many Agribusiness Research systems have engaged in strategic planning and priority setting, few have been able to institutionalize the capacity to undertake such planning on a continuing basis. Several reasons account for this:

- Strategic planning and priority setting have often been seen as being imposed from outside and in too many cases, plans have been developed by outside consultants with little in-house output.
- Too much attention has been placed on developing quantitative estimates of resource allocation, at the expense of analysis of broader science policy issues, such as the potential role of the private sector and its links to the public sector, federal-state division of Agribusiness Research responsibilities, and the opportunity to import rather than develop new technologies. As a result, despite the range of detail on the Agribusiness Research system, most plans lack a vision for the future development of the whole technology system.
- Nearly all of the analysis of Agribusiness projects priorities has been carried out at the macro level to analyze priorities across programmes. However, Agribusiness Research decisions are made operational at the micro project level and there has been no effective mechanism to move from the top-down programme planning to the bottom-up annual cycle of project formulation for funding. As a result, the funded projects in aggregate are often inconsistent with the established macro-level priorities.
- It has proven very difficult to make the hard decisions to reallocate staff and budgets in line with priorities, so that priority setting has often not been translated into practice.

Experiences of the past decade provide a number of lessons that can be applied in developing capacity in future priority-setting exercises:

- Analytical work to guide Agribusiness projects planning is best undertaken from within the Agribusiness Research system, preferably stimulated by a small unit with ready access to senior Agribusiness project managers with a clear mandate to improve priority setting. The role of this unit is largely to facilitate the planning process rather than to undertake planning per se.

- Institutionalization requires strong commitment by Agribusiness project managers to ensure that the results will be considered in decisions on Agribusiness Research resource allocation and that, in fact, Agribusiness resources shift in ways that are consistent with identified priorities.
- The process should be participatory including a wide cross section of scientists and the main stakeholders, policy makers, Agribusiness partners and clients to ensure "ownership." At lower levels of planning and priority setting, participation of users should increase relative to participation of policy makers so that in the design and selection of Agribusiness projects, the main interaction should be between scientists and farmers.
- The development of databases will be an integral part of institutionalization. Databases may cover a variety of production and market information. It is critical also that a system be developed to track Agribusiness Research allocation to ensure that Agribusiness Research resources move in ways that are consistent with priorities. In fact, the starting point for priority setting should be estimation of current resource allocations.

Monitoring and Evaluation of Agribusiness Projects

The other side of priority setting is the monitoring and evaluation of Agribusiness projects to ensure that they are implemented according to priorities, and that they have the expected impacts, in abstract the M&E are presented in [Table-1].

Major Functions of Performance monitoring and evaluation (M & E) systems in Agribusiness projects:

- To highlight Agribusiness projects impacts on national policy objectives
- To provide a basis for assessing progress and making needed adjustments to research projects and policies.

Through monitoring (the routine collection of data on programme performance and programme adjustments to identify problems) and evaluation (the analysis of monitoring data and system performance), Agribusiness project leaders and administrators can track Agribusiness projects performance against plans and provide feedback for needed revisions of plan and strategies. M&E also provides the basis for measuring accomplishments and determining the success of programme activities. Progress towards the desired objectives is measured by various "indicators" of agribusiness project progress. Given difficulties of measurement, it may not be possible to quantify some project outcomes, and qualitative or intangible indicators may have to be used.

Indicators

Process indicators: Are largely for monitoring of individual Agribusiness projects and are the building blocks for monitoring of overall progress in implementing an agreed Agribusiness project programme. Process indicators should be, as far as possible, quantified. A good practice is to require that Agribusiness project proposals include milestones that explicitly layout specific progress in implementation. A good example is provided by the milestone indicators required in projects funded by the Agribusiness Research and Development Corporations in India and around the world.

Agribusiness Project outputs indicators

These are used for both monitoring and evaluation. These may be measured at both the project and programme level and will be somewhat different for basic and applied Agribusiness project. At the planning stage, both Agribusiness projects and Agribusiness Research programmes need to identify the expected outputs of the Agribusiness projects as well as intended users or beneficiaries of the Agribusiness project results.

Impact indicators

These indicators are largely used for evaluation of Agribusiness projects. Impact

indicators are rarely practical or necessary at the project level, but should be applied to the programme level at regular intervals, although, because of the long-run payoffs too much Agribusiness Research, these intervals should usually not be less than five years. Impacts may be measured up to the system level; for example, through studies of economic returns to overall Agribusiness Research investments (e.g., econometric estimates of Agribusiness Research impacts on changes in total factor productivity). Agribusiness Research funders sometimes call for even more in-depth impact evaluation of agricultural Agribusiness Research on national policy objectives, such as food security or poverty alleviation. However, because of the multitude of factors influencing these objectives, this is more difficult to do in practice.

In summary, the priority information requirements for M&E in agribusiness projects

- Each project proposal should include a few simple monitorable milestones that quantify implementation progress as well as progress in achieving outputs. Progress against these milestones can then be measured in annual progress reports, perhaps supplemented by a very brief six monthly report.
- At the institute level, each project should define long run strategies and a five-year work plan, which provides measurable indicators of implementation of the Agribusiness projects and its outputs. Performance against these indicators can then be measured on an annual basis as part of the annual reporting requirements of project leaders.
- On a regular basis about once every five years, each programme should be subject to a comprehensive external review of technical aspects, and an analysis of its impacts.
- All Agribusiness organizations must have an institutional capacity for M&E and for feeding the results back into decision making. Building such a capacity requires only a modest investment and should be a priority for Agribusiness Research organizations. The major problem experienced in M&E systems for Agribusiness project has been the tendency to collect too much information in a highly centralized and bureaucratic manner.

The key elements of successful institutional capacity:

- Designing a simple system that minimizes data collection to a few critical variables. Apart from this, there should also provision for utilizing a variety of mechanisms besides quantitative indicators as an integral part of M&E. These include planning and reporting workshops, field visits, external technical reviews of Agribusiness projects and just walking around to observe experiments.
- Decentralizing the implementation as far as possible. For example, project monitoring should be decentralized to project or sub-project leaders.
- Establishing a very small unit to promote M&E, provide training and develop standards, but to undertake M&E only at the macro level. This should ensure that there are mechanisms for Agribusiness project managers to receive timely information from the M&E system and make corrective actions.
- Contracting some M&E activities, especially impact studies, to independent agencies or individuals. Finally, development of management information system (MIS) to monitor shifts in resource allocations over time in relation to the priorities. Without information on current resource allocations, it is impossible to know the direction in which resources should be shifted, even after the formal priority-setting exercise is carried-out.

Role of Innovation in Agribusiness Projects to enhance food chain efficiency

The innovation plays significant role in all food chains, especially when it comes to PME will be more in terms of transaction costs at the initial stage and longer term requirements of resource which are related to capacity building. PME is not a single philosophy, approach or methodology. Rather, it is a broad collection of approaches and methods meaning different things to different people at different points in time, and it is highly context specific [9]. There is a need to distinguish between conventional and agribusiness M&E and the different parameters of PME.

Table-1 An overview M & E indicators and their implementation in agri-business research

Type of indicator	Example	Level at which applied	Frequency of implementation
Process Indicators for Monitoring Implementation Performance			
Inputs (Supply Chain Management)	Funds expended, scientist time used	Project level with aggregation to programmes, institutes and systems	Annually with six monthly update on progress
Outputs (Operational Management)	Trials conducted, crosses made, surveys completed etc.	Project level with aggregation to programmes, institutes and systems	Annually with six monthly update on progress
Impact Indicators for Monitoring and Evaluation of Agri-Business Research Projects			
Research outcomes (for monitoring and evaluation)	<i>Applied research</i> Technologies developed, recommendations made, publications <i>Basic and strategic research</i> New research methods, tools, techniques, hypotheses proven, publications	Project level and programme level with aggregation to programmes, institutes and systems	On completion of a project (e.g., after 3 years)
			Annually at the programme level (e.g. annual report)
			More in-depth at fixed intervals (e.g. external reviews of programmes)
Research impacts (for evaluation)	<i>Applied research</i> Technology adoption, yield increases, cost reduction, economic return on research investment, impact on total factor productivity <i>Basic and strategic research</i> Utilization of new knowledge to increase the efficiency and efficacy of applied research	Programme, institute and system level	Appropriate year can be fixed for specific projects. In majority cases every five years for each project/programme.

Table-2 Difference between Conventional project and Agribusiness Project Evaluation

Parameters	Conventional Evaluation	Agribusiness Project Evaluation
Why	Accountability, usually summary judgements about the project to determine if funding continues	To empower end user /beneficiaries/stakeholders to initiate, control and take corrective action
Who	External experts	End user Community members, project staff, facilitator
What	Predetermined indicators of success, principally cost and production output	People identify their own indicators of success like innovation, benefits, profits etc. It stress more on Ex-Ante evaluations to maximize benefits from the projects
How	Focus on "scientific objectivity" distancing of evaluators from other participants; uniform complex procedures; delayed limited access to results	Focused on benefits spread over all the stakeholders; simple methods adapted to stakeholders; open immediate sharing of innovation results through local involvement in evaluation processes
When	Midterm and completion	Evaluations are made at frequent intervals depending upon the nature of business activities and processes involved in agribusiness.

The below [Table-2] gives a summary of the differences between conventional and participatory evaluation approaches:

Innovation is always associated with risk-bearing ability and inherent capacity of an organizations which attempts to make revolutionary technologies or products which can explore new markets. Imitators take less risk because they will start with an innovator's product and take a more effective approach.

Innovation has been variously defined as:

- "Innovation is "something new being realised with (hopefully) added value" [12].
- Innovation is the specific tool of entrepreneurs, the means by which they exploit change as an opportunity for a different business or service." [11].
- Successful innovation is the creation and implementation of new processes, products, services and methods of delivery which result in significant improvements in outcomes, efficiency, effectiveness or quality" [10].

In order to develop capability to deal with irregular shifts in innovation, organizations should need to experiment, imitate, adapt and also learn new patterns of consumer's behaviour. Further, they have to develop the properly structured and embedded as a long-term capability. Further, Implementation of innovation is very important aspect of food chain; it can be only achieved by systematically and effectively. Innovation implementation majorly depends on the managerial factors that make up systematic innovation in successful firms with various outline and operations. Many researchers explained about innovation, however, according to Danny Samson (8), he says that approach should examine key building blocks of innovation. He examined that, how these firms drive their activities in each of these areas of activity, and importantly, how they connect them up to achieve a powerful, company-wide innovation focus.

Conclusion

Agribusiness projects are distinctly different from other project which consistently needs innovation at each level of food chain. Further, these projects are need of appropriate stakeholders' selections for priority settings in agribusiness projects. At the Micro level, Agribusiness projects need to develop capacity to conduct analysis of Agribusiness priorities on an ongoing basis rather than as a one-off

exercise. Further, the important starting point is to develop a project information system to track current resource allocations and monitor shifts in resource allocation in accord with priorities. The formal economic analysis can be used for setting Agribusiness project priorities; these should be encouraged at the micro project level and should be broadened to include non-commodity Agribusiness research projects also. However, Agribusiness managers must always ask what the benefit-cost ratio of is doing benefit-cost analysis of Agribusiness Research projects. Apart from this, particular attention should be paid to processes for priority setting and putting in place mechanisms to involve a wide range of scientists, beneficiaries and stakeholders in the process.

Application of research: The institutionalization of such participatory mechanisms will be the key to successful priority setting for more effective Agribusiness projects. Another side of priority setting is M&E of Agribusiness projects to track performance of Agribusiness project status and provide feedback for needed revisions of plans and strategies. This action should be measured against well-defined indicators of process, input, output and impact assessment. All institutions should institutionalize this capacity in a simple and decentralized manner, which can ensure timely flow of information for stakeholders of agribusiness projects.

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