

## **Tool: Assessing the costs and benefits of transforming advisory service delivery**

**Area:** Restructuring advisory service delivery to changing institutional, economic and financial framework conditions and to respond to new demands

**Objectives:** a) Provide transparent information on costs and benefits of service delivery in rural areas,  
b) Facilitate decision-making for restructuring advisory service delivery in rural areas,  
c) Facilitate transparent decision-making regarding cost sharing and financial sustainability of service provision.

### **Use of the tool:**

Providing high-quality services to rural producers at reasonable costs remains a constant challenge. In rural areas, transaction costs can be quite high due to the large number of clients and the dispersed settlement pattern.

In many cases, service provision will therefore be fully or partly financed by public institutions. However, partial cost recovery from beneficiaries of services is definitely on the agenda in many countries as governments aim to increase effectiveness and efficiency of service delivery. Moreover, public service providers are increasingly asked to justify their operations.

The tool may be used by advisory service providers who wish to restructure their organisation. In many circumstances, this will mean the transformation of traditional service provision for rural producers to more targeted, client-oriented facilitation of knowledge management instead of top-down delivery of single messages. Results may be integrated into a broader consultation process on institutional change with relevant stakeholders.

This analytical tool aims to facilitate decision making on the type of investment to be undertaken and on the arrangements for cost sharing. The tool may also be used for analyzing service provision by private actors.

Expertise required: Financial and economic assessment, organisational development, human resource development

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### **Context:**

In many developing countries, specialised government organisations were established to deliver information on modern technologies and to facilitate access to inputs such as machinery, seeds, agrochemicals and credit to rural producers. Over time, due to funding problems these organisations have come under pressure to change their role, to streamline their operations and to increase effectiveness and efficiency. In some countries, service delivery by government was even dissolved and left to private actors. In other cases, central governments scaled down agricultural extension departments, transferred the remaining operations to lower administrative levels, and introduced cost recovery mechanisms.

With renewed interest of the international development community to support programmes for alleviating rural poverty, efficient delivery of high-quality services to the large number of rural producers of agricultural crops and livestock is again on the agenda. Public support to assist small-scale producers to integrate into increasingly globalised value chains is needed.

It has become evident that governments have to play a significant role in organising the appropriate level of service delivery, financing service delivery to rural producers, and actual service delivery. Full-scale private service delivery has proven rather the exception than the rule. Nevertheless, public and private extension organisations have to embark on a path towards more client orientation to increase the quality of service delivery. By making extension more demand driven and more accountable to farmers, participatory approaches can help to ensure that services are relevant and responsive to local conditions and meet the real needs of users. This process needs significant investment in skills development and institutional change management as traditional roles of the extension staff have to change.

Thus, detailed information on the costs and benefits of transforming advisory service delivery into more effective and efficient systems is particularly useful in the following context:

- Transformation of Training and Visit (T&V) type of extension delivery into more client-oriented, participatory advisory systems<sup>1</sup>
- Determining the long-term fiscal sustainability of service provision,
- Develop realistic models of privatisation of extension organisations and financing service delivery by private sector actors.

Information on the economics of service delivery alone is definitely not sufficient to decide on the appropriate investment in a complex change management process. However, it is an important piece of information that increases transparency. It may also be used when

- Determining models of cost recovery (see tool “Charging users for Public Sector Service Provision”)
- Defining the appropriate role for the government actors in service delivery (see tools: “Analysis of Governance Mechanisms in Service Provision” and “Checklist for Defining the Role of the State in Public Sector Service Provision”).

### **Methodological considerations:**

Conventionally, procedures for evaluating costs and benefits of agricultural extension programmes have used indicators such as initial cost of investment (e.g. cars, motorbikes), running cost (fuel, salaries) and increased farm production and income.

In principle, this procedure is also appropriate when assessing efforts in capacity building and change management. We may consider it as an investment in upgrading extension organisations with the ultimate aim to increase productivity in rural areas and reduce poverty. The financial or economic rate of return – based on the assessment of costs and benefits - provides information which can be compared with alternative investment options. However, the institutional setting influences the outcome of the assessment in a significant way. This is especially relevant where investment is embedded in a complex process of institutional learning and organizational change. Therefore, the methodology has to be adapted to the specific circumstances. Relevant indicators and data sources should be carefully selected. Reforms are expected to bring about long-run changes in human capital formation (i.e. skills and capacity of extension staff and farmers), so the full impact and consequences of reforms occur over time.

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<sup>1</sup> The T&V system has been designed for spreading information of “Green Revolution” technologies (e.g. high-yielding seed varieties, synthetic fertilizer, pesticides) in densely populated irrigated areas of South Asia in the mid-1970s. A large number of developing countries adopted this model in the following decades, mostly supported by World Bank funding. In many of these countries, the legacy of the T & V system can still be noticed as existing public agricultural extension organisations built along this model are still in place. Therefore, transformation of these organisations into demand oriented, participatory forms of service delivery will remain on the agenda in the coming years.

The most relevant **methodological challenges** are as follows:

- The assessment of costs and benefits of new extension delivery models often relies on experiences from “pilot projects”. However, by their very nature, pilot projects receive special attention and support. For example, pilots may be located in the most favorable location or may attract especially motivated staff. Results from pilot projects thus demonstrate the technical and economic feasibility of the approach, but rarely reflect average conditions. Results achieved in pilots should be assessed carefully when planning for the so-called “scaling up”. For example, productivity gains may be significantly lower when a new technology or approach is adopted at a larger scale.

- Time lag: Project implementation in rural areas remains a challenge and costs are often underestimated. Experiences from many agricultural development projects around the world have shown that rural producers are reluctant to adopt new technologies before there is consistently replicated, widespread evidence of actual benefits. Adoption rates might therefore remain low for a considerable time period.

- The transformation of an existing agricultural extension organisation is often accompanied by changes in policies related to supporting rural producers. Thus, management of organisational change has to deal with specific demands and even resistance from interest groups and stakeholders. This process requires additional resources for consultation, e.g. to redefine and establish the institutional framework for participation, to build collaborative partnerships, to build the enabling environment for pluralistic service delivery, and to strengthen the capacity of farmer organizations

- Quality of training input into skill development of advisory personnel and producers may deteriorate with expansion of the programme. For example, the scarcity of sufficiently qualified personnel limits the availability of motivated trainers. Thus, coaching and supervision of staff as well as additional incentives may be required to reach the targeted level of high-quality service. The persistent brain drain from rural areas in developing countries aggravates this situation.

- Additional costs occur not only with the extension provider but also at the level of rural producers. The costs of the participating farmers can be substantial, particularly in terms of time, e.g. with day-light training sessions during the cropping season. Furthermore, participatory programs often depend on significant contributions of cash and/or labor from farmers. Steps have to be taken to ensure that these requirements do not exclude the poor.

- The value of additional production is assessed by using market prices. When many farmers adopt new technologies and expand production, market prices for their output may decrease over time, unless additional outlets will be found. This is especially relevant for horticultural crops, such as fruits and vegetables, and where markets segregate into niches of differentiated quality. Innovators and early adopters may realize high benefits, but large-scale adoption may cause a shortage of inputs and labour, resulting in higher costs for others.

## Description of the tool:

### Step 1: Setting the frame

Investment options (objective, size and scale, timeline), the organisations involved and (at least likely) funding sources have to be identified. This step should be done together with decision makers of the organisation that intends to invest in the proposed change (thus securing ownership of the results of the assessment).

### Step 2: Analyse relevant cost structure and components of the investment options and assess the costs in detail

The investment project has to be structured to enable full cost accounting and to assess the likely impacts. Where do costs occur? What kind of costs?

Typical cost categories are as follows:

- Base costs are the costs of the existing advisory operation which remain unchanged with additional investment. This information is particularly useful when policy changes require cost sharing / cost recovery arrangements. Elements include salaries of employees, other staff benefits (housing, health care, transport etc.), office rent etc. These costs are not directly tied to the type of operational activity, e.g. the extension approach, target group of rural producers or type of crop. In many locations, the share of these fixed costs in the total budget of public extension organisations is high, whereas the operational budget is comparatively low. This situation is a serious barrier for efficient service delivery as, for example, mobility of staff for training and providing targeted advice to rural producers is discouraged.
- Costs of initial investment in training and equipment (start-up costs). These cost items are expected to occur only at the beginning of the investment project while benefits will spread over a longer term.
- Recurrent costs of operation. These costs occur on a periodic basis, e.g. monthly or annually. They increase with the scale of operation, i.e. the level of outreach to rural areas. Elements include transport cost, allowances for staff, equipment and material for practical demonstration etc.
- Costs of change management: Frequently, organisational change requires external advice. To a certain degree, these costs are independent of the size of the investment.
- Producers' costs of participation in learning activities. Farmers interested in information and learning about new technologies and management approaches, have initial costs of participating in training sessions ("opportunity costs of time"), and may need additional inputs and labour for upgrading their production.

Some costs are marginal, i.e. they change with the horizontal spread of the activities to include a larger area and more rural producers. Other costs occur independently of the scale of the investment project (see stylised example in annex 1).

### Step 3: Assess the prospective benefits and determine economic viability

Primary beneficiaries of extension service delivery are the rural producers themselves. Their productivity increases, as production increases and/or costs decrease. There are other benefits, including the strengthening of cohesion among producers ("social capital") and the reduction of environmental costs, e.g. through conservation of forest, soil, water and biodiversity resources. Secondary economic benefits may occur over time, e.g. when

additional investment in agricultural processing can be attracted. However, it is even more difficult to identify and assess these benefits compared to impacts in primary production. In the absence of reliable data on prospective benefits, available information on the costs of investment in extension delivery is useful to derive scenarios for the level of benefit that is required to justify the investment (e.g. the “break-even point”, where benefits at least outweigh the costs). Such numbers provide information to assess the likelihood of achieving an acceptable rate of return. Where returns are below costs, the information provides transparency on the amount of subsidy to be provided.

**Step 4: Discuss findings with stakeholders and integrate results into a broader consultation process.**

Results of the economic analysis of investment alternatives may be used in decision making together with other information, such as an institutional analysis. Ideally, a process of sound decision making would involve consultation with relevant stakeholders, including clients and service providers. Also, proposed cost sharing and cost recovery mechanisms should be discussed with stakeholders to foster acceptance. The consultation process should be based on a set of relevant scenarios that are easy to communicate (refer to tool: scenario-technique).

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**Annex 1: Model calculation: Costs of advisory service delivery (in currency units per year)**

Item	Unit costs	500 clients	1,000 clients	2,000 clients	5,000 clients
Base costs	5,000 per advisor	50,000	100,000	200,000	500,000
Start-up costs		30,000	50,000	75,000	100,000
Recurrent costs	10 per client	5,000	10,000	20,000	50,000
Costs of change management		40,000	50,000	60,000	80,000
Costs of participating producers	2 per client	1,000	2,000	4,000	10,000
Total costs		126,000	212,000	359,000	640,000
Total costs per client		252	212	179.5	128