

7 Integrating technology, policy and institutional change

7.1 Overview

7.1.1 Policy, institutions and research

ARD recognises that technology is not the only factor leading to change in agriculture, and that research the prime driver of agricultural development. Rather, research is only one of the sub-processes in agricultural innovation. To be effective, ARD needs to be effective at levels of action and organisation. For example:

- At the **farm** level (improving production and quality of crops and livestock, integrating different activities within the farm to maximise farm profitability, while at the same time preserving natural resources, etc.);
- At the **community** level (organising, managing common resources and cooperative enterprises, acquiring and sharing knowledge, etc.);
- At the **value chain** level (vertical and horizontal integration of actors, improving financial, business and technical advisory services, improving competitiveness, etc.);
- At the **organisational** level (improving linkages between actors, ensuring actions are developed within a broader framework of joint and societal objectives and policy frameworks, etc.)
- At the **municipal, district, provincial and national levels** (developing social and economic policy, improving infrastructure, communications, integrating agriculture with other economic sectors, etc).

Of course, these are just some of the system levels that can be visualised or defined. We could also consider watersheds, business clusters, etc. The important point is that innovations are the outcome of innovation systems that act at different levels, and which require the integration of research and technology with policy and institutional development.

7.1.2 Outline of this chapter

This chapter explores some of the policy and institutional measures that need to accompany technology, if research is to have the desired impact.

In section 7.2, we consider at how “driving forces” or “macro-trends” can be incorporated into scenario planning, so that research is better targeted to the future conditions, and not those of yesterday.

Part of the forces that determine the context for agricultural research and development are policy changes. In section 7.3, we therefore take a closer look at macro- and sectoral policy, focusing on how research can be better integrated with policy development through providing better evidence for policy makers.

In section 7.4, we review land reform in South Africa, giving a short historical overview within the context of different ways of thinking about land reform and its objectives. We also review some of the specific experiences of field projects conducted as part of ARD learning programmes in the last decade, and note how these projects have experienced difficulties or conflict in creating functional partnerships between key stakeholders.

In section 7.5, we give a short overview of how organisations need to adapt to be able to implement ARD – emphasising measures to better share knowledge with other organisations and stakeholders, and manage their “soft” resources in a way that better manages knowledge and facilitates interaction.

In section 7.6, we describe how the different technology, policy and institutional objectives of ARD can be formulated into a logical objectives hierarchy for the purposes of project planning. We also review the basic elements of an ARD proposal and how these can better fit the needs of different financing agencies.

Finally, in section 7.7, we briefly review different approaches to monitoring and evaluation (M&E), and how to integrate learning into these processes in addition to accountability. As will be evident through the content of chapter 3, building the capacity to reflect on experience, learn lessons from this experience, and replan, is at the heart of the continuous improvement of ARD processes.

7.2 Scenario Planning

Rural livelihood systems are never static – they are constantly changing, and the pace of change is increasing. The political, demographic and economic factors that act as the external “driving forces” for change in livelihood systems will not be the same by the time your project is implemented or expected to have an impact on these systems. In South Africa, several trends have indelibly defined the characteristics of the South African social, political and economic environment since 1994 and continue to do so.

In an era of anthropogenic climate change, not even the agro-climatic conditions can be assumed to be constant, with many areas in South Africa expected to be markedly drier in the coming decades. It is therefore important to ensure that development interventions are designed to fit the context of these future conditions, and not the ones of today – which will not be relevant by the time many agricultural research projects can be expected to have an impact.

7.2.1 Identifying driving forces

“Driving forces” or “macro-trends” are factors that are causing changes in livelihood systems and agricultural practices. These factors are external to the system (potentially or actually) being managed by the stakeholders: i.e. they are beyond the control of the partners – the stakeholders who are involved in the analysis and who will take action that results from such an analysis.

Driving forces can include changes in social, technological, environmental, economic and political factors. Some of these forces are global, some are more specific to South Africa. Some are constructive influences, and others can be considered as destructive trends. For example:

- **Demographic factors** - population increase, in/out migration (leading to skill gain/loss), changing age/gender structure, poverty levels (which are increasing in South Africa), disease (such as HIV/AIDS, which is increasing placing a burden of care on the economy), etc.
- **Laws** - affecting land ownership (e.g. those being implemented by land reform policies in South Africa), labour relations, environmental protection measures, etc.
- **Policies** – subsidies, price controls or guarantees, import/export controls, quotas and tariffs, exchange rates, etc (which have gradually relaxed in South Africa, within in the context of similar global trends).
- **Markets** – access to, local, national and international markets (which has generally increased since the reforms of the 1990s); growing competitiveness of producers in other regions, countries etc.
- **Technology** – availability of new genotypes, machinery, etc.
- **Institutions** – new actors, influences, social organization (including the strengthening of civil society in South Africa, as well as growing regional and international partnerships).
- **Information** – increasing availability though communications technology (internet, mobile phones), etc.
- **Employment** opportunities in the agricultural and non-agricultural sectors, including manufacturing, business, services, migration/ remittances, etc. (Net employment levels are decreasing in S. Africa).

- **Climate change** (increased risks of dry spells, storms, gradual shifting of agro-ecological zones, etc).

Of course, it is sometimes difficult to draw the line between external driving forces, and factors over which stakeholders do have some control. For example, an individual farmer may consider the characteristics of a watershed (water availability from streams, groundwater level) or the existence or not of a farmers' organization as external (something over which he or she has no individual control), whereas collectively farmers may be able to exert control over these factors. The definition of driving forces in each individual case will depend on the definition of the system of interest, and the level of organization of this system.

7.2.2 Scenarios and strategic planning

7.2.2.1 *What is a scenario?*

In theatrical terms a scenario is the outline or sketch of the scenes of a play, giving particulars of the scenes and situations. In planning or everyday use it also means a projected or imagined course of events or future situation. In this learning resource book, a scenario is considered to be *a future situation resulting from a combination of external driving forces* that influence future development possibilities.

The context within which development decisions are made is very complex and dynamic. Making predictions is very difficult because of the changing nature of driving forces and unpredictable risks.

Thinking about future scenarios – the different ways in which the future might unfold - is a way for stakeholders to bring their perceptions and visions of the future together. These stakeholders can then confront the different versions and decide which scenarios are most relevant to the formulation of a common strategy. At the same time, the process of building these scenarios helps stakeholders change their attitudes.

In this sense, developing scenarios is *not* the same as simply forecasting or predicting the future. The process does not always try to take current trends and use them to describe a single image of the future, but rather looks at different futures - what might happen, if trends continue or if certain shocks occur. Making dependable forecasts (confidently predicting the future) in development is a very difficult task because of the complexity of issues and unpredictability of events. Scenario development or planning is thus a creative process where different trends or future situations are hypothesized, and combined to form a (limited) range of possible futures that will each require different courses of action (strategies) on the part of stakeholders.

7.2.2.2 *Linking scenarios to strategic planning*

The construction of different scenarios highlights different potential conditions that might exist in the future. Stakeholders can then make strategic decisions about which actions are likely to produce an optimal outcome within the most likely scenario; or at least will avoid the risk of producing a disastrous outcome within possible scenarios. An example of the former is a strategy of changing from livestock to crop production, based on a probable scenario of lower livestock prices and increasing markets for crop products. An example of the latter is a strategy of intensifying into horticultural crops, based on a possible scenario of land redistribution and smaller farm sizes. Of course, strategies that produce good outcomes across the range of scenarios are to be preferred; but this is not always possible.

This is the process of strategic planning. In this resource book, we therefore refer to different possible development “strategies”, as integrated sets of research and development options that should result in a desirable outcome (or vision of the future) under a given scenario or scenarios.

Depending on the time horizon (e.g. 5 years, 10 years, 50 years), scenarios will be very different. For practical purposes, the time horizon used in a planning activity needs to fit the

requirements of all stakeholders. However, stakeholders' mandates, interests and potential for action may not be the same. For example: farmers will have more immediate concerns that need to be accommodated in short term scenarios. On the other hand, the development of some problems needs to be explored over a longer time frame. Past trends can give an idea of what time perspective to take.

For agricultural research particularly, it is also important to think of medium to long-term futures. Much agricultural research, particularly strategic or more basic research, or research into species with longer life cycles such as fruit or industrial trees does not yield tangible benefits for a period of 7 or 10 years, or even more. Changing the hydrological characteristics of a watershed or countering problems of soil fertility are better considered over a longer time frame: a generation or more. Planners need to be aware that these time horizons are often beyond the immediate life of many projects.

7.2.2.3 When is scenario planning useful?

The process of identifying different future scenarios, discussing the likelihood and desirability of these different possibilities, helps stakeholders review and change their attitudes. The process of building scenarios:

- Clarifies stakeholders' views and values
- Challenges conventional thinking
- Encourages debate
- Provides a common framework for addressing critical concerns, and
- Provides a common framework for identifying alternatives

Scenario identification can therefore be seen as a forward-looking, co-operative process or learning tool. A good scenario does not have to show the future accurately. It is more important that it enables an organization or a group of stakeholders to learn, adapt and enrich their collaboration towards achieving a common objective.

Through scenario planning, stakeholders uncover their own biases and assumptions. It helps challenge the cultural mind-set that prevents them from seeing alternatives.

Scenario planning is therefore particularly useful when:

- There is a great deal of uncertainty over the way in which a problem or issue will develop;
- There do not seem to be many opportunities or alternatives;
- There is a lack of long-term vision;
- The local economy, or institutions are experiencing or about to experience significant change;
- There are strong differences of opinion between stakeholders;
- A common language and framework are needed to bring together so many different views.

7.2.2.4 Building scenarios

As mentioned above, the purpose of scenario building is not to produce an accurate picture of the future. Instead scenario building helps stakeholders to make strategic decisions about their future, and to orient joint action. Good scenario building enables stakeholders to design a strategy that can adapt to several possible futures. To facilitate this, the focus should be on identifying the main driving forces and areas of uncertainty.

The general stages in scenario building are:

1. **Definition of the research and development challenge.** As a first step to scenario building, the ARD or stakeholder team produces a model of the “operational system” that describes the problem or opportunity as recognised by all partners. This systems model should include within the boundaries of the system those factors or components that the partners consider to be under their potential control, and show as external factors or driving forces that affect this system. It is important to remember to include both predetermined trends and critical uncertainties or risks.
2. **Prioritization of the driving forces.** In complex situations, there may be many driving forces. It can be useful to analyse how the different forces interact with each other (e.g. by using an influence or problem causal diagram); there is often a hierarchy of driving forces with three or four key forces (normally of a broader political or economic nature). A limited combination of these driving forces is then used to build the scenarios, as using too many driving forces makes the scenario analysis more complex.
3. **Discussion of the trends/shocks.** The next stage is to build hypotheses about the future situation (i.e. conclusions about what is likely to happen in terms of trends and shocks). These will often become clearer through discussions involving diverse stakeholders. Based on the problem situation and tentative future scenarios, it is also important to decide what time horizon to plan for: 5, 10, 25 years or longer.
4. **Definition of the scenarios.** The different hypotheses can then be combined into a limited number of different scenarios. At this stage, it is important to give priority to scenarios that are feasible, different, and likely to have a significant impact on the development challenge. Each scenario is given a name that describes the vision of the future situation.
5. **Formulation of the future implications.** In this final stage, the resulting scenarios are evaluated. Relevant questions here include:
 - What are the implications for different development strategies, or research and development options – in terms of policy, organisation, institutional change, government policy, etc?
 - Who stands to gain most from each scenario? Who stands to lose? For example, what will be the impact of each scenario on different stakeholders, or different types of household?
 - What factors need monitoring, in order to adjust future action plans, programme or projects? What are the “critical assumptions” for these projects (see logical framework analysis in section 7.6).

7.2.3 Bibliography – scenario planning

7.2.3.1 Acknowledgements

This section was written by Richard Hawkins, ICRA, using material prepared for ICRA learning programmes by Nour Sellamna (ICRA).

7.2.3.2 Further reading

Internet gateways

Scenario planning resources. http://www.well.com/~mb/scenario_planning

EarthTrends. Environmental, social, and economic trends that shape our world, maintained by the World Resources Institute. <http://earthtrends.wri.org>

Scenario Planning. www.jiscinfonet.ac.uk/tools/scenario-planning/index.html

Documents

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7.3 Integrating ARD with policy development

7.3.1 What do we mean by “policy”

In common usage, a “policy” is often taken to mean a plan of action to achieve a certain outcome, or a set of principles that are intended to guide actions to a certain end. Following this usage, a policy can therefore include both goals (objectives) and the methods or means used to try to achieve these goals.

7.3.1.1 Different levels of policy making

Policy can refer to decision making and taking at different levels:

- “*Government policy*” represents the way in which governments try to influence human activity for the betterment of society at a national or local level. Typical policy areas include economic policy (to improve economic growth as reflected in measures such as GDP), social policy (to influence how wealth is distributed within society, as reflected in levels of (relative) poverty, income disparity, etc.) and environmental policy (to protect the natural resources and/or to recreational areas, etc.);
- “*Organisational policy*” (or “corporate policy”), refers to ways in which an organisation or corporation tries to guide the activity of its employees, stakeholders or customers. This can be through personnel policies, or the ways in which the organisation defines “success”.
- “*Individual policy*” can be considered as the personal ethics or aspirations that guide our own actions or relationships with others.

When discussing agricultural research, we tend to refer mainly to government policies. At an individual or project level, we also tend to regard such government policies as a fixed or unchangeable part of the context within which we design or plan our own research activities. However, and as we will see in this section, there is often more scope than assumed to affect government policy at local or even national level. With organisational policy, there is obviously more scope to affect these, the higher one climbs to achieve managerial responsibilities - but even junior employees can take actions to influence their managers and corporate policy, and hence effect organisational change. Finally, of course, anyone can change the way in which they personally interact with others.

The important point is that “policy” is not always fixed. Depending on the circumstances, and the level of decision-making, the development or improvement of policy should be regarded as a legitimate and integrated outcome of agricultural research for development. In this resource book, organisational policy is discussed in more detail in the section 7.5 on “organisational change”; personal policy is briefly discussed in chapter 2 under “partnerships and teamwork”. This section therefore focuses more on the interaction between research and government policy in the field of agriculture.

7.3.1.2 Macro and sectoral policies

Government policies are often distinguished by:

1. **Macro policies** – those policies that affect the economy as a whole. Examples include:
 - Labour laws
 - Exchange rates
 - Interest rates
 - Trade tariffs and quotas

- Outside investment, tax rates or incentives, etc.
 - Infrastructure – roads, electrification
 - Social investment: education, health, etc.
2. **Sector-wide policies** – those which are designed to affect mainly one sector (e.g. agriculture and rural development):
- Producer incentives (e.g. input/ subsidies, output prices, credit)
 - Market interventions (output price, standards, traceability)
 - Land tenure and property rights (land reform programmes, registration)
 - Water management (irrigation infrastructure, laws of water use, etc.)
 - Rural finance (laws and regulations on microfinance, credit, etc.)
 - Institutions (mandates and financing of public organisations, rules and incentives for private organisations, etc.)
 - Technology (including research policy, scale and priorities of public investment, etc.)
 - Infrastructure (provision of/incentives/regulations for storage facilities, irrigation, processing plants, etc.).

An important point to remember is that policies are rarely perfect – the desired positive outcomes are often offset by negative outcomes, which may have been planned for as acceptable costs, or they may be unintended. Macro policies may have a positive impact on one sector of the economy (e.g. manufacturing), but a detrimental impact on another (e.g. agriculture, which accounts for about 3-4% of GDP in the South Africa). Policies may also have a positive impact on one area (e.g. economic), but a detrimental impact in another (e.g. social, or environmental).

A particular example is land reform policy, which is often justified both in economic terms (by those who argue that small farms can be more efficient than large farms), as well as in social terms (by those who want to readdress previous injustices of apartheid policies and exclusion from the most productive lands). As will be seen in section 7.4, these two aims of land reform policy may not always be compatible.

In South Africa, policy in the agricultural sector has evolved considerably since 1994, with the general aims of creating opportunities for previously disadvantaged groups to play an integral role economic development. These policies and policy changes have driven change and been more important in the success or failure of agriculture – especially land reform farms and communal farming – than have been technical factors. Current challenges include the need to improve support to communal and emerging farmers through continuing to improve tenure rights, improve linkages between support agencies and actors in value chains, better direct research and extension services, better manage key resources such as water, improve access of products to international markets, etc. If ARD is to contribute positively to change and rural development, it cannot ignore policy or policy development, and needs to integrate research and technology within this broader framework.

7.3.2 Increasing the role of research in policy development

7.3.2.1 *The policy development process*

The process of policy development is often divided into three phases of:

- *Goal setting* – where the objectives of the policy are determined;
- *Analysis* – where the available evidence is analysed, alternative measures are subjected to technical, economic, social and environmental evaluation, potential

“side effects” or negative consequences are evaluated, and an informed choice of the optimal policy mix is then made;

- *Implementation* – where the optimal mix of policies is implanted, along with measures to evaluate the various outcomes (both expected and unexpected), feeding back to continued adjustments to the policy mix, etc.

It would be nice to think that the process of policy development is always this logical and systematic, and that each phase involves full and equal participation of the different interest groups involved. Of course, the process is rarely this ideal. Some stakeholders have more influence than others, the desirable information or data lacking (or outcomes not easy to quantify), and the different outcomes are therefore often disputed.

Two “types” of policy development are sometimes therefore contrasted:

- “*Interest-based*” policy development, where the subjective values or opinions determine more the process. “Insiders” can influence this process through lobbying; “outsiders” through activism or direct action.
- “*Evidence-based*” policy development, where research or objective information provides more of the basis for the decision making process. “Insiders” can influence this process through advising or briefing; “outsiders” through advocacy or petitioning.

For ARD practitioners therefore, the challenge is therefore to play more of a role in “evidence-based” policy development, and by doing so strengthen the role that evidence plays in policy development generally.

7.3.2.2 *The “context – evidence – links” framework*

To improve the role of research in evidence-based policy development, ARD practitioners need a better understanding of the reality of the policy development process, the opportunities within this process for leverage, and the methods or tools they can use to effect this leverage. One framework for this purpose is the “context – evidence – links” framework developed by the Research and Policy in Development (RAPID) Programme of the Overseas Development Institute in the UK.

As its name suggests, this framework focuses on 3 areas, where researchers can inform themselves and focus actions to improve the use of research information into policy development:

1. **Context**

Questions ARD practitioners need to answer about policy context:

- What is the policymaking process?
- Who makes policy in the area of interest? Which stakeholders are influential in the policy development process?
- Are these policymakers and/or influential stakeholders open to new ideas?
- Who supports/ opposes the various viewpoints and/or research evidence?
- What are the opportunities and timing for input into formal policy making processes?

Actions ARD practitioners need take on policy context:

- Get to know the policymakers, their agendas and their constraints.
- Look for ways to work with policymakers (e.g. through commissions).
- Identify potential supporters and opponents to the research-based evidence.

- Identify opportunities to participate in regular policy processes.
- Look for opportunities to present research findings at high-profile policy events.
- Budget for interaction with policy makers.

2. Evidence

Questions ARD practitioners need to answer about policy evidence:

- What is the current theory, the prevailing narratives or viewpoints that are driving policy development?
- What type of evidence exists to support or undermine current policy?
- How does the research-based evidence support or differ from the current narratives?
- What type of evidence is accessible to policymakers? What type of evidence do they find convincing?
- How trustworthy or credible is current research seen by policy makers?

Actions ARD practitioners need take on policy evidence:

- Establish credibility with policy makers over the long term, e.g. by building up programmes of high quality work.
- Provide practical solutions to problems.
- Establish legitimacy by using participatory and action research methods with recognised constituencies and stakeholders.
- Develop a clear strategy for communicating research findings.
- Ensure that research output includes targeted policy briefs, as well as technical research findings in peer reviewed journals and/or extension bulletins.
- Build a convincing case and present clear policy options in policy briefs. Use clear writing, non-specialist terminology, and visual aids where possible (graphs, photos, drawings). Package new ideas in familiar theory or narratives. Do not shy away from presenting (evidence-based) opinions or subjective judgements, but make it clear that this is what they are.
- Use face-to-face meetings to communicate your results, where possible.

3. Links

Questions ARD practitioners need to answer about policy links:

- Who are the key stakeholders in the policy related theme?
- What links and networks exist between them? How does information circulate between key stakeholders?
- Who are the intermediaries between the rural poor and policy makers? How much influence do they have?

Actions ARD practitioners need take on policy links:

- Get to know the other stakeholders.
- Establish a presence in existing networks, or build new networks.
- Build coalitions with like-minded stakeholders.

- Develop partnerships between researchers, policymakers and policy end-users.
- Use informal contacts.

7.3.3 Bibliography – policy development

7.3.3.1 *Acknowledgements*

This section was written by Richard Hawkins, using sources cited below.

7.3.3.2 *References*

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7.3.3.3 *Further reading*

Internet Gateways

Research and Policy in Development (RAPID). Programme and gateway of the RAPID Programme of the Overseas Development Institute, London. Programme now completed, but many useful documents and links. www.odi.org.uk/rapid

Power tools: for policy influence in natural resource management. <http://www.policy-powertools.org>

7.4 Land Reform Policy in South Africa

7.4.1 What is land reform?

Land reform generally consists of measures aimed at a more equitable and fair distribution of agricultural land. Usually this entails the transfer (mediated by the government) of ownership of land from larger landowners to small-scale farmers or landless people (the “beneficiaries”).

Nevertheless, land reform programmes often include different objectives – and these different objectives may even be contradictory in practice.

On the one hand, some argue that land reform is necessary to decrease inequality, to reverse social injustice, or to absorb the unemployment created by capitalism and industrial development

Another argument for land reform is to increase the number of farms so that they can effectively compete with each other and produce food for lower prices. But others argue that land reform can actually jeopardize production and food security, as it takes land away from technologically advanced, efficient, large-scale farmers that can make use of economies of scale.

These different objectives determine the expected outcomes of a land reform programme - should these be focused on production, on economic output, or on other values such as subsistence and housing? These are questions that are relevant to South Africa’s land reform programmes.

7.4.2 History of land reform in RSA

During the 20th century, millions of black South Africans were forcibly removed from their land and homes. The Natives Land Act in 1913, the Group Areas Act of 1936, and the creation of “scheduled reserves” all resulted in restrictions on movement, land access and ownership for black South Africans. The Bantu Self-Government Act of 1946 and the Native Authorities Act of 1951 reinforced these apartheid policies with the formation of eight “homelands” or “Bantustans”, to which all black South Africans were allocated citizenship and in some cases forcibly resettled.

These restrictions ended black commercial agricultural production that was evident during the late 1800’s and early 1900s and created a legacy of small-scale and subsistence production systems among black farmers that is still seen today. These resettlements contributed towards loss of farm management skills; most homelands were overcrowded, land quality was often low (often non-contiguous scrublands) and the land was held communally - with all the problems common to communal management systems. South African black men moved to urban areas leaving women to look after children and the traditional home. Men made remittances that met the needs for everyday life for their families back home in the rural areas, but they themselves settled in urban areas.

These changes resulted in South Africa becoming a highly urbanized society with very little involvement of the black population in rural agriculture. If some form of commercial agriculture was possible in the homeland areas, this was often based on heavy reliance on the then republic of South Africa for fiscal aid, employment and special programme design and implementation. This assistance did not increase the farm managerial skills of black South Africans, as many husbandry practices were carried out centrally by special programme staff, leading to a “dependency syndrome”. Even today, the majority of rural black South Africans still live on communal land, registered as property of the state.

When South Africa became a democracy in 1994, the Reconstruction and Development Programme (RDP) was developed to implement priority policies:

- Redress injustices of apartheid
- Foster national reconciliation and stability
- Underpin economic growth
- Improve household welfare and alleviate poverty

Although the RDP mentioned equality and reconciliation as key objectives, it mainly had an economic focus. The basic idea behind the land reform programme, along with the Agricultural Black Economic Empowerment (AgriBEE) scheme, was to transform economic relations in the rural areas. Nevertheless, the ethical and symbolic aspect of land reform were still important, as land rights and access are themes that inextricably related to identity, belonging, and perceptions of justice. Redressing historical injustices was a major goal of land reform policy, and if anything has become even more important during recent years.

To date, land reform in South Africa has been demand-led. Land, sellers and beneficiaries are not identified by the state, but by the people themselves. The role of the state has been to provide financial assistance, and mediate between landowners and beneficiaries on the 'willing buyer–willing seller' principle.

Three main land reform policies have been followed:

- *Redistribution* – to redress the racial imbalance in access to land.
- *Tenure reform* – to securing tenure rights of people or communities whose tenure of land is legally insecure as a result of past racially discriminatory laws or practices.
- *Restitution* – to restore the property of persons or groups (some 3 million people) displaced during the apartheid era, or to give suitable compensation.

With these three pillars, the South African government aimed for a highly efficient small-agricultural sector that would generate economic growth

7.4.2.1 Land Reform Programmes

A number of land reform and related programmes have been introduced in South Africa:

- The *SLAG (Settlement/ Land Acquisition Grants)* policy was introduced in the first years of land reform. In the SLAG programme, historically disadvantaged South Africans could apply for a cash grant to purchase and develop farmland. In practice, beneficiary households had to pool their grants to be able to buy an entire farm from a willing seller. In these instances of 'group ownership' a legal entity (usually a community land trust or communal property association), was established that was formally registered as the owner of the property. In most of these cases, there were too many beneficiaries (up to 500 households) compared to the size of the farms that were redistributed. The farms could therefore not support all the beneficiaries as full-time farmers. Moreover, these groups of claimants were heterogeneous. This caused disagreements over what should be done with the land.
- The *LRAD (Land Redistribution for Agricultural Development)* programme, launched in 2001, differed from SLAG in one major respect: beneficiaries did not have to be poor to qualify for a minimum grant, and those who had more savings and who could raise bigger loans to finance their farms qualified for successively larger grants. LRAD aimed at stimulating 'black' entrepreneurship, and creating a class of black commercial farmers to replace the white commercial farmers.
- The *ISRDP (Integrated Sustainable Rural Development Programme)*, also introduced in 2001, gave land reform a wider rural development framework. The aim was coordinate local, provincial and national actions to provide post-

settlement support in the land reform process, and improve sustainable rural livelihoods. The ISRDP combined the formerly separate fields of land reform and poverty reduction. A typical ISRDP programme would focus on a certain area to ensure a coordinated, integrated, holistic programme. It would utilize linkages, partnerships and strengthened institutional capacity as well as community-based institutions.

- The *LARP (Land and Agrarian Reform Programme)*, introduced in 2008, aims to increase collaboration between the Department of Land Affairs (DLA) and the Department of Agriculture (DoA), both at the national level and the provincial level. LARP aims at accelerating the pace of service delivery and further coordinating an integrated approach to land reform. LARP shows a strong economic focus, both on the reduction of unemployment and on increasing agricultural production. LARP has the following objectives:
 - To redistribute five million hectares of white-owned agricultural land to ten thousand new agricultural producers; this is five hundred hectare per new producer;
 - To increase the number of black entrepreneurs in the agribusiness industry by ten percent;
 - To provide universal access to agricultural support services to the target groups;
 - To increase agricultural production by ten to fifteen percent;
 - To increase agricultural trade by ten to fifteen percent for the target groups.

Other Acts that have become important in the last ten years of land reform include the Communal Land Rights Act, in which the ownership of land in the former homelands is given to communities residing there, and the Expropriation Act in 2006, in which the government has obtained the right to forcibly buy-off farmers in order to get land.

Policies for land reform and agrarian reform have therefore been characterized by dual objectives. One objective has been to reduce poverty through redistributing land rights to the landless poor and creating sustainable livelihoods among the rural population. A second objective has focused on market integration, emphasising agricultural productivity of landowners who show a more competitive and liberal-economic approach to land use. These two policy objectives have not been easy to reconcile in practice.

7.4.2.2 Challenges faced by land reform programmes

These programmes have not always had the intended success, both in terms of acreage assigned to new owners, and also in terms of the production and economic activity achieved by these new owners.

Land restitution has perhaps been the most successful, in terms of claims settled (74,574 as of 2007, compared to the target of 79,696 set in 1994, according to the Dept. of Land Affairs, 2008). Many of these claims have been settled with cash compensation, or restitution of state-owned land.

The aims of the combined Land Redistribution and Tenure Reform Programme include the redistribution of thirty percent of white-owned agricultural land by 2014 for sustainable agricultural development (Department of Land Affairs, 2008). However, this is unlikely to be achieved at current rates of progress, as by 2007 only some 2.3 million hectares had been redistributed, compared to the target of about 25 million hectares by 2014.

The tenure reform programme has also been a slow and difficult process. In many places communities and individuals reside on state land and therefore have no security of tenure. However, the Communal Land Rights Act of 2004 has assisted in the transfer of communal

land (currently held by the state) to communities and individuals who reside on that land. It is anticipated that this programme will provide security of tenure to more or less twenty million people.

Even where land has been restituted or redistributed, productive projects have often not been successful, with claimants needing assistance, training and investment to use the newly acquired land in a profitable and sustainable way. Government policy has assumed those once beneficiaries have a secure title to their land, they will use this asset in ways that contribute to economic growth and get themselves out of poverty.

In practice, this has not happened. It is at least questionable if all black land claimants want to be farmers, as claimants may have other reasons to apply for a piece of land.

A second problem is that, even if the new owners do want to farm, access to land by itself does not ensure production and economic development, if access to markets, technology and credit is still limited for various reasons. Claimants therefore also need further support in terms of credit, training and transport, if they are to use the newly acquired land in a profitable and sustainable way. A number of programmes have been created to provide or facilitate this comprehensive support, which requires clear agreements, objectives and task divisions between beneficiaries, government departments, other organisations and stakeholders.

In practice, the goals and criteria for success of land reform projects have often been unclear, with different stakeholders having different perceptions that cause confusion or conflict. Goals and criteria for success may also change during the process of implementation, as a result.

However, this complexity of different perceptions and goals of land reform is not a problem in itself. It is inevitable that different stakeholders have different ideas about the goals and potential benefits of a particular land reform initiative. But this complexity does become a problem when it is not taken into account in the development and assessment of a land reform project. Typically, policy makers, experts and researchers have one particular set of success factors and benefits in mind, like maximizing commercial output or an increase of monetary income of households. Other goals, criteria or success factors are easily overlooked. The way in which such goals or success are set depends on the framework with which one looks at land reform.

7.4.3 Land reform frameworks

Different theoretical “frameworks” exist in academic debates about land reform. These frameworks that give direction to the way reality is interpreted, and focus on certain aspects of reality while obscuring others. They are built on particular assumptions of how “things work”, and of what is important and what is not. The choice of a theoretical framework therefore determines the way in which one looks at a (land reform) problem, the solutions proposed, and how one evaluates the outcomes. Three contrasting frameworks are considered below.

7.4.3.1 *Neo-liberal approaches*

The neo-liberal perspective mixes neo-classical economic theory with liberal values, and is based on the workings of the market. Farms operate in the market and are assumed to maximize profit, competing with other firms for resources. This ensures the optimal use and allocation of scarce resources. To participate in the market, farmers must externalize, and become entrepreneurs. They must commit to scientifically sound ways of farming, purchase inputs, and sell their products on the ‘free market’ in such a way to maximize production and profit.

Within this overall approach, there are two viewpoints within South Africa. Some liberals opt for the preservation of the large-scale commercial agriculture: they acknowledge the need for black participation within the sector but argue that the poor and landless are best served by the

development of the urban and industrial sector. They regard land reform beneficiaries as inefficient, inexperienced and lacking access to the necessary resources. They argue that these problems have turned South Africa from a food exporter to a food importer.

The second, more populist position argues for reform through the market. Farmers should decide whether they want to sell or buy land, which will then be valued according to its productive quality. Proponents of this position argue that South Africa's large-scale agriculture can be made more efficient through the development of a new class of entrepreneurial family farms and increased competition.

7.4.3.2 Political economy approaches

Whereas neo-liberals see capitalism as a force of positive change, political economists see it as a force that leads to the exploitation of the weak and poor. Like neo-liberals, political economists focus on the market as a force of change. However they also include power in their analysis by dividing society into more and less powerful and economic groups or classes. Political economists argue that the increasing exposure of the poor to the forces of privatization and commercialization lead to the weakening of the poor and landless classes, with capitalism mainly benefiting and reinforcing the more powerful classes.

Under this view, even if poorer rural classes receive land, they are disadvantaged through lack of capital, access to technology and communication/information networks, and lack political power. Their position is further weakened, as new technologies and scale enlargement lead to increased production, which in turn leads to a decrease in prices of the products sold and profit margins. As agro-food chains are increasingly integrated, smallholders depend on contracts with supermarkets and other retailers, who use this dependency to increase their own value added, further cutting into the profit margin of the small farmers. Smaller farmers are thus disproportionately affected by this treadmill, and eventually go out of business.

Proponents of this viewpoint charge that the political elite - businessmen and large-scale farmers – shape land reform. Beneficiaries fail to obtain good land, because the 'willing buyer-willing seller' mechanism allows landowners to sell land above the market price, and set the price for which beneficiaries try to obtain grants.

Furthermore, marginalised groups such as women are often not beneficiaries as grants are often made to households instead of individuals – and men are more likely to control household resources. Even when grants are made to individuals, women's rights still depend on the power relations within households and communities, inheritance practices, paternal structures, etc. When the size of grants depends on the size of the beneficiaries' own contribution, the richer groups are able to receive more and the poorer groups less.

Political economists also argue that land reform beneficiaries are forced to conform to a specific vision of agriculture – large scale, capital intensive farming which is seen as the most productive form of agriculture. Those willing to acquire land are then forced to pool their grants and work together, on the assumption that the group of beneficiaries will work as a single "viable" unit. In practice, however, such groups are often inoperative and then seen as "dysfunctional", leaving the rights of members ill defined and poorly protected. Other visions of agriculture, with sub-divided smaller holdings, are seen as "unviable".

All these arguments lead political economists to conclude that that existing class, race, gender and power structures remain politically and economically unchanged by land reform.

In contrast to neo-liberals (who argue for more market and less state interference in land reform), political economists see the solution to land reform problems in more state intervention, which is necessary to counter market forces and powerful groups.

7.4.3.3 Actor-oriented approaches

Both neo-liberal and political economy perspectives see development as a linear process determined by structural forces. In both theories the weaker groups in society are visualized

as homogenous groups, in which all members in the group share the same needs, and have the same reasons for their decisions related to the use of land. They are portrayed as victims of wider processes and external pressures in society: policy decisions by the government or economic processes at the national or global level. In both approaches, disadvantaged groups are not considered to have “agency”.

However, there has been much evidence that individual farmers act differently from how both neo-liberals and political economists predict. It is important to study farmers as actors in their own terms, to see how they make sense of the world, how they behave, identify and deal with the constraints and opportunities they face. Knowing this can improve policy.

In other words, actors have “agency”: they have knowledge of their own situation, they can reflect on things that are happening to them and they can find ways to cope under pressure. So even though the market may be a force that restricts the behaviour of small-scale landowners, these may still devise ways to cope without disappearing (as theorized by political economists) or turning into entrepreneurs (as theorized by neo-liberals). They do not necessarily adopt the profit maximizing logic, nor only value production as promoted by neo-liberals. They may have another logic, which is embedded in their personal circumstances and values. This logic differs for different people and localities. By understanding this logic – by understanding the livelihoods of rural households, as well as the views, assumptions and objectives of other stakeholders - the actor oriented approach helps to understand what actually happens “on the ground”, and to develop alternative strategies that may offer other (more suitable) paths to development.

7.4.4 ARD experience with land reform in RSA

A number of ARD studies carried out during 2001-2008 have illustrated some of these livelihood strategies, stakeholder differences and potential development strategies.

These studies were carried out by teams of professionals as an integral part of ARD learning programmes organised by the ARC, together with Provincial Departments of Agriculture and ICRA. Some 20 studies were carried out in Free State, Northern Cape, Mpumalanga, KwaZulu Natal, Eastern Cape, Limpopo and North West Provinces. All of the studies were conducted with land reform groups or communal farming areas, and the main agricultural activities included both livestock (cattle, goats, game) and crop production (both rainfed and irrigated) in the different areas.

The research process followed typically included meetings with the partner institutions (usually Provincial Departments of Agriculture, PDA), communities and land reform beneficiary groups to gain an idea of the different perspectives surrounding a defined development “problem” as initially identified by the PDA. These meetings were then followed by formal or informal surveys using structured questionnaires, individual or small group discussions, or participatory appraisal tools such as transect walks, ranking diagrams etc. The teams then analysed the information using systems diagrams, “typology” of rural households and stakeholder matrices, to better understand household livelihood strategies and potential research and development options.

The typical problems, and suggested solutions/opportunities, of these land reform groups or communities can be summarised under three main – albeit inter-related - headings:

1. **Motivation and livelihood diversity.** In many of the studied groups, there were “few farmers” (among many landowners), few “involved” beneficiaries of land reform projects (although all wanted to share the profit), or a general “lack of unity” (in rural communities).

Most of the rural or beneficiary households gained much or all of their income from pensions, remittances, employment in non-farming activities, or paid employment in commercial agriculture outside the immediate scheme or community. Many of the land reform beneficiaries or communal farmers were also elderly, with their children

expressing little interest in agriculture. Researchers also noted “dependency syndrome”, the expectation by rural households of wage payment from the government for activities on their own landholdings. Where households did have significant agricultural activities, these ranged from mainly subsistence agriculture (household use of products, livestock mainly for savings or social ceremonies), to commercial production. This diversity of interests was reflected in mistrust and conflict within beneficiary groups or communities, with theft or sabotage not uncommon.

This diversity of interest and livelihood strategies meant that the expectation of government departments for the beneficiary group to behave as a unit, managing a collective and commercially viable “farm”, was clearly unrealistic in most cases. The study teams therefore recommended that this diversity of interests needs to be explored beforehand, with clearer criteria and screening for potential applicants to land reform programmes. Also, a variety of livelihood/management options needs to be considered for the different groups of beneficiaries within particular schemes, including part-time farming or production for home use, land leasing, individual commercial farming (perhaps as part of a marketing cooperative), or “strategic partnerships” - as well as the main model of “collective commercial farming” promoted by government departments.

2. **Stakeholder communication and organisation.** Apart from the problems of communication and organisation within beneficiary groups or communities, the study teams found similar problems between these groups and the other stakeholders (government departments, potential commercial or “strategic” partners, etc.). Beneficiaries commonly complained of “lack of consultation”, or poor communication between them and executive committees, little support from extension services, etc. Overall, there was marked lack of communication, mutual understanding and agreement on common objectives and trust between the different actors.

A particular area where organisation is critical is the management of communal resources (such as rangeland, water resources or irrigation infrastructure). Again, it was not so much the technical issues themselves (e.g. optimum stocking densities, plant water requirements, etc), but rather a common vision on how these resources should be deployed and the organisation to manage these resources that was lacking.

Recommendations made by the teams included a number of suggestions for better linkages between stakeholders as well as the development or improvement of organisations and linkage mechanisms (“stakeholder fora”, “coordinating fora”, steering committees, partnerships, farmers’ associations, cooperatives, etc.). Also mentioned were the need for better representation on these organisations or coordinating mechanisms (once established), as well as rules or codes of conduct, and improvement in leadership skills, etc. A second main area of recommendations was for better - and joint - planning (feasibility studies, business plans, etc.)

3. **Commercial production and marketing.** It was already noted above that many communal households or land reform beneficiaries are not actually interested in commercial production and that land reform or community development schemes need to include other visions of development.

However, there are also groups that are interested in commercial production, but face a variety of challenges. These included enterprises operating at a loss, a general lack of “economic viability” (also expressed as too many beneficiaries for the scheme, or unrealistically small holdings). A common finding was the lack of knowledge concerning potentially commercial enterprises and products and their markets, as well as linkages to established markets.

Recommendations here included better organisation of farmers for marketing (e.g. marketing cooperatives, strategic partnerships), as well as local infrastructure (e.g.

abattoirs for livestock products). Once realistic business plans are agreed with farmer groups, these need improved support from business, technical and financial services.

7.4.4.1 *Conclusion*

The experience of with land reform and community development programmes in the RSA described in this section reinforces the relevance of the ARD principles espoused in this resource book:

- The need to understand and improve stakeholder partnerships;
- The need to learn through collective action and experience;
- The need to understand complex livelihood systems;
- The need to use both qualitative and quantitative methods to understand development challenges;
- The need to balance economic, social and environmental aspects of development; and
- The need to integrate technology, policy and institutional aspects into research and development.

Without such an integrated approach to research and development, land reform and small-scale agriculture projects are likely to continue to disappoint and fail to achieve government aims of economic development and poverty alleviation.

7.4.5 Bibliography – land reform

7.4.5.1 *Acknowledgements*

Sections 7.4.1 to 7.4.3 were edited by Richard Hawkins from the report by Karin Bos et al (see citation below). Section 7.4.4 was added by Richard Hawkins, based on notes by Aart Jan Verschoor (ARC) and experiences of ARD learning programmes in South Africa.

7.4.5.2 *References*

Bos, K., Pauwelussen, A., van den Berg, L., Notten, E., and A.G. Draaijer, 2009. “Learning about Land Reform in South Africa: A Social Scientific Approach: Development of a training module on land reform in South Africa” Informal report commissioned by the Agricultural Research Council, South Africa.

Department of Land Affairs 2008. The Land and Agrarian Reform Project (LARP): Concept Document. Department of Land Affairs, South Africa.

7.4.5.3 *Further reading*

Internet gateways

PLAAS - Institute for Poverty, Land and Agrarian Studies. <http://www.plaas.org.za>

LALR - Livelihoods after land reform. <http://www.lalr.org.za>

Documents

Hall, R. (ed.) 2009. Another Countryside? Policy options for land and agrarian reform in South Africa. Institute for Poverty, Land and Agrarian Studies, Cape Town. South Africa. Available at: <http://www.plaas.org.za>

7.5 *Organisational change*

The implementation of the ARD principles described in this resource book implies more than a simple change of “method”, or the way things are done. Participation in genuine and egalitarian stakeholder partnerships, joint learning through collective action, inter-disciplinary analyses of complex livelihood systems, informed use of both qualitative and quantitative methods, the integration of ecological, economic and social perspectives, and integration of technology, policy and institutional options require substantial institutional change or capacity development. And while such change is a pre-requisite in all types of stakeholder organisation, these changes are perhaps especially required in agricultural research organisations that have tended to develop mandates, structures and management systems based on the “transfer of technology” rather than the “innovations systems” or ARD model.

Key to these organisational changes is the concept of knowledge sharing and knowledge management. Only through sharing knowledge both within and between organisations can the key ARD principles of mutual learning within stakeholder partnerships be achieved. This section will therefore start by looking at the role of knowledge sharing and knowledge management in organisational change, and then focus on those management areas key to ARD.

7.5.1 Organisations and knowledge sharing

7.5.1.1 *Knowledge Sharing*

Knowledge sharing is a key element of successful teamwork, partnerships and multi-stakeholder initiatives relying on collective action.

From the point of view of knowledge sharing, two types of knowledge can be distinguished:

- **Explicit** (or “codified”) knowledge, which is essentially factual and hence potentially available to all.
- **Implicit** (or “tacit”) knowledge, which is contained within and owned by individuals.

The challenge for knowledge sharing is to make as much knowledge as possible explicit and openly available.

Individuals possess knowledge - skills and attitudes that reflect their training and experience. When individuals share this knowledge, and this knowledge becomes embedded in a group or team’s norms and processes, it can be said that it has become part of the group’s knowledge and capacity.

When individual and group knowledge becomes widely shared amongst the members of an organisation, and incorporated and embedded not only in documents and repositories but also in organisational routines, processes, practices and norms it can be said to have become organisational knowledge or capacity.

Through sharing therefore, knowledge can be passed or transferred from individuals to groups and from groups to organisations.

As well as preventing the loss of knowledge from an organisation when a staff member moves on, the sharing of knowledge between individuals and groups and organisations also facilitates the generation and accumulation of additional knowledge. Knowledge is created in dialogue and interaction, and hence the knowledge available to an organisation (and/or any community) increases with sharing and conversely decreases if and when hoarded. Hence, the knowledge of groups is greater than the sum of the knowledge of the individuals that compose those groups. Similarly, the knowledge of an organisation is greater than the sum of the knowledge of the individuals and groups that make up that organisation. And where knowledge is effectively shared between organisational partners in an ARD partnership, this

knowledge then becomes greater than that of the individual organisations or individuals in the partnership.

Teams, organisations and partnerships that effectively share their knowledge therefore become more knowledgeable and perform better than those who hoard knowledge. Anything we do to promote knowledge sharing is likely to result in improved organisational performance. In general, organisations that encourage knowledge sharing are likely to perform better than those who don't, particularly in terms of effective, efficient and relevant use of their assets. Similarly those teams and/or partnerships formed around complex issues and who adopt ARD principles and encourage sharing are likely to out-perform those who do not.

The basic requirements of effective knowledge sharing are simple:

- A source of knowledgeable (staff and stakeholders)
- Time and space for interaction

Knowledge is created in dialogue and interaction hence the knowledge available to a community increases via sharing and decreases if hoarded. By providing time and space we can encourage knowledgeable individuals from within an organisation (staff) and/or from outside the organisation (stakeholders) to share knowledge. This sharing not only prevents loss of knowledge but also allows it to grow and accumulate so as to become enhanced organisational knowledge.

So as to have access to sources of knowledge, organisations require a sound recruitment and staff enhancement (betterment/training) policy and encourage frequent contact and interaction with its stakeholders

The time and space for interaction can be both formal and informal:

- **Formal spaces** for interaction consist of scheduled activities such as meetings, seminar series, as part of reflection and monitoring and evaluation process of many organisations. However, it is important that these activities allow for joint learning about processes and stakeholder relationships - as well as the more normal organisational accounting of the more tangible inputs and outputs.
- **Informal spaces** include those often unbudgeted and unscheduled opportunities for people to interact. These can be encouraged through measures such as open doors within offices, group coffee breaks, informal discussion sessions or "brown bag" lunches, establishing "communities of practice", arranging joint field visits, open days, etc.

"Saving" time and space that results in reduced interactions between staff, and staff and stakeholders, will reduce the accumulation of knowledge by an organisation and will therefore likely reduce its performance over time.

7.5.1.2 Knowledge management

Knowledge management can be said to be the art and skill of fostering and disseminating, through sharing, the results of dialogue and whereby knowledge is both transferred from individuals to groups and from groups to organisations and partnerships of organisations.

Knowledge management is widely accepted to consist of four key processes:

- Knowledge creation,
- Knowledge storage and retrieval,
- Knowledge distribution, and
- Knowledge application.

Knowledge management therefore involves the planning, organising, directing, and controlling of knowledge assets and includes processes of identifying, creating, capturing, conserving, organising, transforming, transferring, and delivering the compiled “know-what” and “know-how” of the organisation or system.

It provides for finding or getting the right information to the right person or stakeholder at the right time in a user-friendly manner, and greatly contributes to an organisational or system-wide memory - defined as “the means by which knowledge from past experience influences present activities”.

Incorporating these processes into the structures and perhaps most importantly into the “culture” of an organisation will enhance its learning abilities and performance.

Undoubtedly, new information and computer technologies (ICT) have created the potential for greatly improved infrastructure for knowledge management. But ICT (hard assets) alone will not automatically lead to improved knowledge management. The technologies/hard assets are only the storage system and pipelines for knowledge management. New technologies do not create knowledge and cannot guarantee or even promote knowledge generation or knowledge sharing in a corporate culture that does not favour those activities. The availability of good technologies alone does not change a knowledge hoarding culture into a knowledge sharing culture.

7.5.2 Managing organisations for ARD

To encourage knowledge sharing and facilitate the interactive nature of ARD requires change in organisational processes and hence management. For convenience, these management capacities are discussed below under four main areas: human resource management, linkage management, management of interactive planning and learning cycles, and output and information management.

1. **Managing human resources** involves both improving the ARD competencies of staff as well as providing appropriate incentives for ARD.
 - The ARD practitioner needs competencies that go beyond traditional disciplines, to include “meta-disciplines” (e.g. systems thinking) and social skills, as well as the personal attitudes, behaviour and values that allow the social interaction necessary for working with others. As well as utilising opportunities for formal professional development (degrees and short courses), these individual competencies can be developed through measures such as induction programmes and mentoring for new staff or work teams, as well as embedding continued learning into ongoing projects and activities. Above all, however, it requires the creation of learning “culture” within the organisation that encourages continued learning, feedback from other staff and stakeholders, and personal improvement.
 - Where a particular expertise or competency is lacking from an organisation (e.g. many agricultural research institutes are lacking expertise in economics and the social sciences), co-opting or seconding staff from other organisations with such expertise is sometimes a viable option.
 - Incentive and reward structures need to be based on action and change outcomes, i.e. encourage multidisciplinary and multi-stakeholder interaction in partnerships, rather than the more traditional focus of individual outputs and information products such as professional publications and reports. Professional incentive structures should therefore value and encourage linkages and communication and feedback from non-research partners. They should also encourage individual staff to continually improve their own performance, try out new ways of working, assume added responsibilities, and deputise for others.

2. **Managing internal and external linkages** is essentially a question of making partnerships work (see section 2.2)
 - Improving internal linkages requires the facilitation of work by interdisciplinary teams across disciplinary departments, commodity programmes, etc. In part, this can be achieved by organising work teams around specific development themes (R&D challenges), but it is critical not to ignore simple measures for creating the time and space needed for both formal and informal interaction, such as “open doors” of managers, joint coffee rooms, open-plan offices, regular discussion sessions, etc.
 - Improving external linkages requires the improvement of communications, linkages, knowledge sharing and working partnerships with other stakeholders in themes of joint interest. For research organisations this involves creating channels of information flow with other stakeholders, as well as improving the general openness of research organisations and their “approachability” – often through simple measures such as installing a user friendly “front desk” to encourage visitors and security measures that do not turn people away, etc.
 - Linking research to policy formulation (in addition to the normal technology focus) requires early involvement of policymakers in the analysis of innovation systems and how the policy environment affects these. In this way, the lessons learned from individual programmes and pilots can lead to evidence-based policy development (see section xx on policy development)?
3. **Managing planning and learning cycles** requires joint planning in ARD partnerships with other stakeholders, as well as joint learning.
 - Partnerships imply locating research plans within the context of agreed multi-stakeholder action plans. These joint plans should outline the joint vision and objectives of stakeholder partnerships, the problem/opportunity analysed from the different viewpoints, actions that need to be taken, and respective roles and responsibilities. Such multi-stakeholder action plans can be formalised as agreements on public-private partnerships, MoUs and/or contracts, although such formal arrangements by themselves do not ensure functional partnerships if other prerequisites are not there (see section 2.2).
 - Research proposals, especially those relating to applied and adaptive research, should therefore be placed within the broader context of integrated development plans developed by stakeholder partnerships, and clearly outline how research results will be utilised or taken up by research partners.
 - Functional partnerships also require a jointly recognised mechanism for “convening” or facilitating the interaction of stakeholders around specific research and development themes. This may be achieved by one stakeholder being recognised by others as the “convenor” or leader for a specific research and development theme or issue, or it may involve an outside or neutral actor or organisation with the specific role of catalysing and facilitating interaction.
 - ARD requires a “learning culture” within organisations requires making available (prioritising) the time and space needed for the interaction that leads to such joint learning. This implies joint feedback and reflection sessions with partners to review experience and lessons learned that are related to themes of common interest, as well as formal mechanisms that capture and document these lessons learned. These sessions may need to be explicitly planned for and facilitated (perhaps even by outside and “neutral” facilitators), and not expected to happen spontaneously.

- “Lessons learned” in ARD should include those that refer to intra- and inter-institutional processes. This in turn requires organisations to feel comfortable with documenting subjective opinions about these personal and inter-organisational relationships (as well as more objective outcomes such as technical research results). Creating a learning culture change in turn requires a change of thinking, from the predominant systematic cause-effect attribution logic and emphasis on products (e.g. as represented by “logical frameworks”) to more emphasis on behavioural change as outcomes (see section 7.5 for more discussion on monitoring, evaluation and learning approaches).
 - Finally, the incorporation of lessons learned usually requires flexibility in annual planning and budgeting procedures (rather than being rigidly fixed by organisational planning procedures such as fixed logical frameworks). If plans and budgets cannot be modified to reflect the lessons learned and new “good practices” as they emerge, learning cannot be utilised or consolidated.
4. **Managing information outputs** requires producing and providing information that help ARD partnerships achieve their objectives. Such management implies:
- Producing results that are validated by other stakeholders and disseminated in easily accessible and suitable formats (magazine/newspaper articles, radio/television programmes, websites, advisory bulletins, field days, etc), as well as in professional journals and reports.
 - Documenting differences in perceptions, knowledge, interests and power between stakeholders that provide a basis for collaborative management, planning, monitoring and evaluation, as well as more “objective” technical data.
 - Producing technical innovations and policy recommendations that are adapted to best fit the overall circumstances of the different stakeholders, and which reflect the interactive learning between these stakeholders.
 - Developing explicitly recognised knowledge management procedures, practice and staff responsibilities, which go beyond just recording and circulating information to explicitly encourage the exchange between staff within and between organisations. Only when individuals share knowledge and it becomes embedded in an organisation’s norms and processes it can be said that it has become part of that organisation’s “knowledge”. Consequently, partnerships that effectively share their knowledge become more knowledgeable and hence stronger.

Changing the management practices or culture of an organisation is not easy. The types of change that encourage ARD rarely occur unless there is a critical mass of dissatisfaction with current organisational performance, as well as a vision of how to improve. Such dissatisfaction often results from a “crisis” – usually funding threats or loss of income – that often result from “external” pressures of other stakeholders, either directly or through their political representatives. The vision can often reflect a renewed commitment to improve the performance of an organisation as reflected by the level of satisfaction of its major stakeholders, which in turn is often related to the degree to which the organisation shares its knowledge and contributes to mutual knowledge creation.

Finally, all change has to start somewhere. An organisation is more likely to change when both it and its staff understand that change starts with them, and an individual willingness and flexibility to change. Expecting others (individuals or organisations) to initiate change will result in long waits and disappointment.

7.5.3 Bibliography – organisational change

7.5.3.1 Acknowledgements

This section was written by Richard Hawkins, ICRA, using material prepared for ICRA learning programmes by Bob Booth (ICRA) and sources cited below.

7.5.3.2 References

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7.5.3.3 Further reading

Internet gateways

Support Program for Institutional & Capacity Development (SPICAD), from Wageningen University Research. <http://portals.wi.wur.nl/spicad/?SPICAD>

ILAC - Institutional Learning and Change Initiative, from the CGIAR. <http://www.cgiar-ilac.org>

ICT-KM Program of the CGIAR. Promotes and supports the use of information and communications technology (ICT) and knowledge management (KM) to support the work of the CGIAR. <http://ictkm.cgiar.org>

Knowledge sharing toolkit. <http://www.kstoolkit.org>

Knowledge management for development (KM4Dev). <http://www.km4dev.org>

The Knowledge Management Resource Center. <http://www.kmresource.com>

The African Capacity Building Foundation. <http://www.acbf-pact.org>

Capacity building guide, from OneWorld.net. The NGO perspective on Capacity Building in the developing world. <http://uk.oneworld.net/guides/capacitybuilding>

Reshaping tertiary agricultural education, from the Technical Centre for Agricultural and Rural Cooperation (CTA) <http://knowledge.cta.int/en/content/view/full/6315>

Sustainability, Education and the Management of Change in Africa (SEMCA). <http://www.iln-africa.net/index.php/semca>

The Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) <http://www.ruforum.org>

7.6 Formulating and financing an action plan

7.6.1 Establishing objectives

7.6.1.1 Objectives hierarchies

An objective is something we want or hope to achieve. Objectives can exist at several different levels. Usually, more complex objectives are achieved by breaking these down into smaller objectives that are then tackled by one or several activities each.

In teamwork, it is essential that everyone has a common understanding of what needs to be done and why. In complex situations, it is easy to lose sight of the higher (greater) objectives by getting bogged down in the smaller or intermediate objectives and associated activities, or for different team members to give more importance to some intermediate objectives than others.

A common language to describe different objectives is part of forming a common or team understanding of these objectives. In the language of projects, a specific terminology has been developed to clarify objectives at different levels and aid a common understanding.

The four most basic levels of objectives are:

- **Goal.** This is the higher objective to which a project or programme is expected to contribute. In other words, the project or programme will not achieve this level of objective by itself, but forms part of a number of projects or programmes to this end.
- **Purpose** (also called “expected outcome”, “general objective”). This describes the outcome that a specific project or task is intended to achieve. In other words, it represents why the project or task is being done.
- **Outputs** (also sometimes called “specific objectives”, “products”, “results” or “deliverables”) These represent what needs to be produced, at the end of a given time period, in order to achieve a given purpose.
- **Activities.** These are the actions necessary to produce a given output in time. In other words, they represent how we will do something

It is important to distinguish between purpose, outputs and activities for the task, project or programme in which we are involved. For every project, there is normally one purpose, and this represents what we assume will happen if we achieve the outputs specified. Figure 7.1 shows this relationship between activities, outputs and purpose.

Figure 7.1 The relationship between activities, outputs and purpose

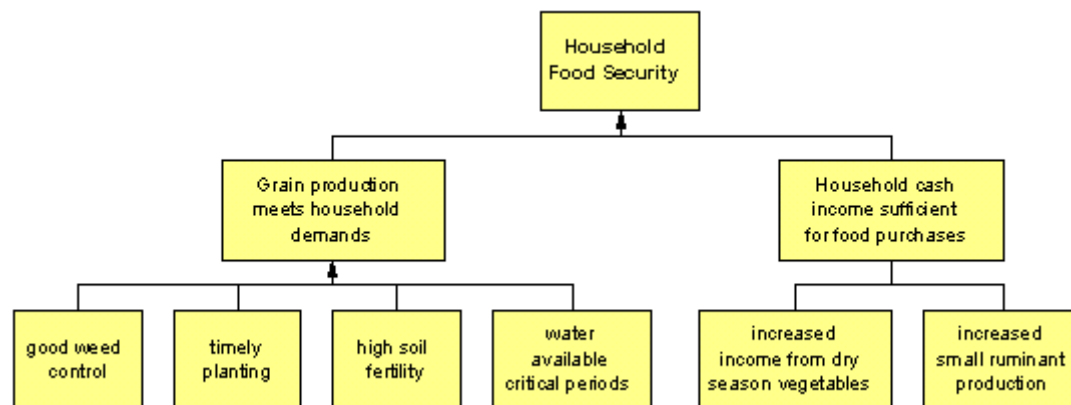


To take a simple example, a government, planning or financial agency might have the goal of increasing farmer income in a certain area. Studies have shown that the area is suitable for dairy production. A project might therefore be formulated with the specific purpose of increasing milk sales from this region. Project outputs might then include a) a number of new milk cooling units being used on farms, b) a functioning system of milk collection from farms to a central cooperative, c) a certain number of farmers trained in cattle nutrition, milk hygiene, etc.

However, in designing this project, we might have made an assumption about future milk prices and the attractiveness of this dairy farming in the region relative to other ways of earning a living. If interest rates fall, or if milk prices fall, or if foot and mouth disease is discovered in the region, we might manage to achieve all these outputs and still fail to achieve the purpose of increasing milk production. In general terms therefore, a project manager is responsible for carrying out the specified activities and achieving project outputs, but not necessarily for achieving project purpose.

The logic of such a hierarchy of objectives is shown in a hypothetical example in the “tree diagram” shown in Figure 7.2.

Figure 7.2 A hierarchy of objectives



Usually, the “higher” objectives (e.g. purpose) are shown above the “lower” objectives (e.g. outputs). The logic of the diagram is therefore “read” from bottom to the top.

This diagrammatic representation has the advantage of clarifying whether objectives are “higher” or “lower”, how they are interrelated, and hence the formulation of purpose, outputs and activities. In this example, “household food security” could form the goal, “grain production meets household demands” could be a project purpose, and project outputs could include: a) improved animal-drawn cultivators introduced for weed control and timely planting, b) green manures tested and seed material available for soil fertility improvement, and c) canals constructed for irrigation at critical periods.

7.6.1.2 Making assumptions

Assumptions are statements about factors and/or events that a project or partnership cannot - or does not choose to - have control over, but which will affect the achievement of project or joint objectives. In other words, the assumptions relate to the factors external to the “system” being managed by the partners engaged in a project.

The logic of the relation between assumptions and objectives is given in Figure 7.3.

Figure 7.3 The relation between objectives and assumptions

Objectives	Assumptions
...this development goal being achieved, which...	...will be sustained, if these assumptions about development factors are maintained.
...this purpose being achieved, which...	...if these hypotheses about factors promoting development are true, will lead to...
...these outputs being produced, which...	...if these assumptions about factors external to the project are correct, will lead to...
If these activities are carried out, and..	...if these assumptions about implementation are true will result in...

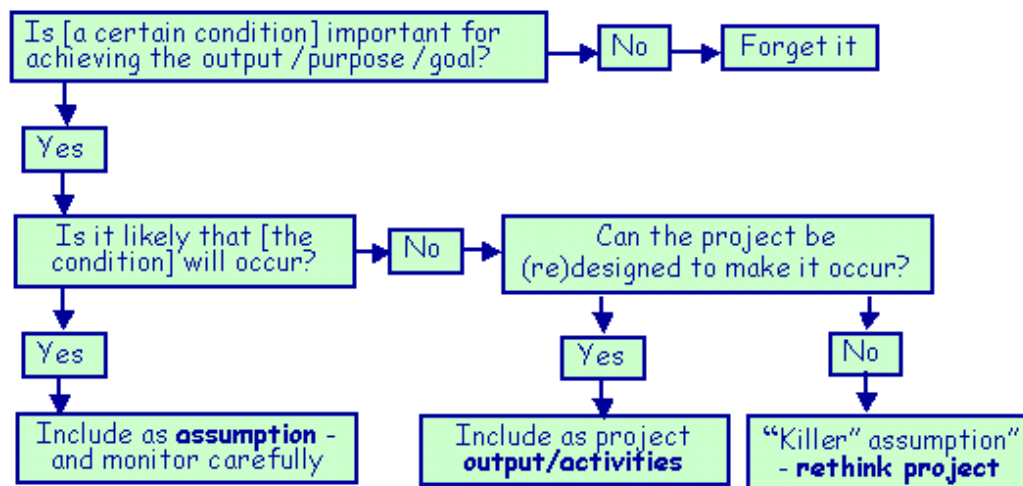
For example, agricultural projects often make assumptions about the future prices of inputs and agricultural products when research is being planned into certain crops or commodity systems. Where possible, these assumptions should be made on the basis of careful research into price trends and also take into account likely changes in policy or future trade developments that will affect these prices.

A project may also make assumptions about collaboration between different stakeholders: e.g. nationally funded research institutions and provincial development services or NGOs. Again, such assumptions should be based on a careful look at the reality – and not just on how things are “supposed to be”. If the reality is that collaboration is not likely to happen (if nothing is done), and that such collaboration is critical to project success, then the project designer has two choices: either accept that the project is likely to fail (and hence is not worth funding), or include activities that lead to improved collaboration as a specific project output. Often ARD teams include statements such as “farmers will adopt the technology” as assumptions, but this is not very helpful: in this case the reasons why farmers might not be able or want to adopt should be investigated in more depth.

Projects often fail (i.e. the purpose or goal is not achieved), not because the outputs are not achieved, but because critical assumptions were not identified, and/or the risk of something happening that would affect the effectiveness of these outputs was underestimated. Research into these risks and assumptions is as much part of careful project design and research planning as the definition of objectives.

The decision about what to include as an activity or output in a project, and what to leave out or include as an assumption, is determined by which factors are under the potential control of the partners in the project; that is whether these factors are considered to be part of the “system” being managed by the partners, or part of the environment of the system. Usually, the environment is considered to consist of those factors that are beyond the control or mandate of the stakeholders likely to be included in the project. This logical sequence determining objectives and assumptions is shown diagrammatically in Figure 7.4

Figure 7.4 Relationship between assumptions and project design



7.6.1.3 Indicators

In project planning and evaluation, indicators show if an objective has been achieved. Where possible, indicators should be made up of 4 elements:

- **Factor** (e.g. increased potato production)
- **Quantity** (e.g. potato production increased by 1000 tons/yr)
- **Quality** (e.g. potato production by small scale farms in the Southern Region increased by 1000 tons/year)
- **Time** (e.g. potato production by small scale farms in the Southern Region increased by 1000 tons/year, by 2015).

Indicators are of little use if they consist of information that is not available. It is therefore important to identify where or how data on them can be obtained: a means of verification. For example, if the indicator is “potato production by small scale farms in the Southern Region increased by 1000 tons/year, by 1999” - where will we get the information needed to show if this has happened? What information will we need? In some cases, this information may be available from statistics or figures collected by public agencies. Where such data is not normally available, however, it may be necessary to include the appropriate data collection activities within the project.

7.6.1.4 Logical framework

The logical framework is a matrix or table showing the hierarchy of objectives of a project, together with the critical assumptions, indicators and means of verification.

By identifying the key project ‘elements’, a logical framework can facilitate a common understanding between project staff, and between project staff and other stakeholders.

The advantages of a logical framework are that it:

- Creates a hierarchy of objectives, by identifying the different levels of achievement.
- Shows how the different activities and outputs of a project are related
- Shows the link between internal project elements (activities, outputs) and external factors (the assumptions).
- Shows how the project will be monitored and evaluated

A hypothetical and simplified example of a logical framework is illustrated in Figure 7.5.

Figure 7.5 Hypothetical example of a logical framework

Objectives	Indicators	Means of verification	Critical Assumptions
Goal: Increased income from fruit production	Average net income on small holder fruit farms in S Province increased to \$500/ha by 2020	Agricultural census data	
Purpose: Production of high table-quality fruit produced for national markets	<ol style="list-style-type: none"> 1. Average sale price is at least \$4/kg at 2000 prices 2. Average production is at least 200 kg/tree 3. At least 500 farmers with production >10t by 2020 	Farm surveys	Benefits spread to other districts Fruit prices do not fall below \$10/kg (2000 prices) Prices of fertilizer do not increase by more than 20% ... etc
Outputs: <ol style="list-style-type: none"> 1. Private nurseries selling quality trees established 2. Farmer marketing cooperatives established 	<ol style="list-style-type: none"> 1. At least 5 private nurseries established 2. At least 5 farmer groups established by 2004 	Key informant surveys Key informant surveys	Fruit production remains profitable activity, relative to alternative land use and livelihoods Road access to fruit areas is completed by 2010
Activities: <ol style="list-style-type: none"> 1a. Disease resistant varieties selected 1b. Farmers trained in grafting 2a ... etc. 	<ol style="list-style-type: none"> 1a. Varieties available for propagation 1b. 10 selected farmers trained in ... Etc. 	Research reports Key informant surveys	Selling planting stock is profitable activity for specialised farmers DevCon (NGO) continues work with farmer organizations

Although the logical framework has a number of benefits in project planning and implementation, it also has disadvantages:

The emphasis on quantifiable indicators results in projects with concrete or physical products (such as increases in production) rather than dynamic processes (such as strengthening the capacity of farmer groups to develop their own technology)

The rigidity of the logical framework can lead to a loss of flexibility to adjust activities as and when new information becomes available which might require new activities or a re-evaluation of the project viability.

7.6.2 Financing R&D activities

7.6.2.1 Characteristics of donors

As government and institutional resources for research decline it becomes more and more important for ARD practitioners to be aware of other sources of funding for their work.

Not only is knowledge of the sources of funding important; but also a deeper knowledge of the range of donors as well as the types of financial support that are available is required for successful fundraising.

Success is also dependent on you identifying the right source of funds for you. You need to check out potential donors very carefully. You should know their interests, their guidelines and their rules.

Multilateral organizations interested in rural innovation include the World Bank, the European Union (particularly through its Directorate for Development, and through the 7th Framework Programme of the Directorate of Research), the specialised agencies of the United

Nations, such as the Food and Agriculture Organization (FAO); the International Fund for Agricultural Development (IFAD); the United Nations Development Programme (UNDP); and the regional development banks, such as the African Development Bank.

Characteristics of funding through multilateral agencies such as these include:

- Financing is mandated by participating governments with overall objectives of increasing world economic growth and decreasing poverty;
- Financing is arranged through national governments, usually requiring counterpart funding from the national government;
- Generally finance is made available for large investment projects (millions of USD or EUR) at a provincial or state level, in the form of low-interest loans. Some technical support projects may be on grant terms;
- Selected projects are usually within well-defined “frameworks” or defined priority themes or topics;
- Projects are normally formulated by “in-house” teams of experts, according to very tightly defined specifications concerning proposal content and presentation;
- Most multilateral organizations have very extensive websites, including access to many publications on ARD experiences, methods, etc.

Bilateral donors working at a government-government level, include: Britain’s Department for International Development (DFID); Holland’s Department for International Cooperation (DGIS); the Swiss Development Cooperation (SDC); The (German) Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ); The Danish National Aid Agency (DANNIDA); The Canadian International Development Agency (CIDA); The International Development Research Center of Canada (IDRC); and the US Agency for International Development (USAID), etc.

Characteristics of funding through bilateral agencies include:

- Overall funding is motivated by a strong emphasis on poverty alleviation, environmental programmes and biodiversity.
- Generally directed to the poorest countries, although country priorities may reflect historical ties (e.g. ex-colonies).
- Financing arranged on a government – government basis. Many activities are on a grant basis, and may be carefully coordinated with other multi-lateral and bi-lateral donor efforts.
- Generally contract formulation, technical assistance and evaluation teams from private firms, on a competitive tendering basis
- Generally finance medium to large projects (EUR 100,000 and above). Increasingly, funding is directed to “programme support” rather than specific projects. In some cases, embassies have authority over small funding amounts (eg up to EUR 5,000) for local and communal initiatives, which are flexible and free of bureaucratic procedures

Sub-regional bodies for agricultural research and development, such as the Southern African Development Community - Food, Agriculture and Natural Resources Directorate (SADC/FANR) in Southern Africa offer competitive grants, usually for collaborative projects involving more than one organisation active in the region.

Government funding (federal, state or provincial or district) often comes from programmes defined at a ministry level. Examples include the national funding for specific national research and/development institutes or extension programmes (“core funding”), although

many countries are increasingly making use of competitive funding arrangements where funds are open to competitive bidding by both public and private organisations (such as the National Agricultural Research and Technology Fund in RSA). Characteristics of national government funding include:

- Funding often determined by political interests, and is often directed at particular groups of beneficiaries (regional or by type), or at particular products or commodities.
- Often bureaucratic requirements take precedence over flexibility and innovation
- Division into defined programmes or sectors. Often, interdisciplinary or integrated ARD projects need “deconstructing” to be able to finance them through several different government programmes or agencies.
- Government financing is susceptible to changes of emphasis when governments change.

Private foundations and corporations generally finance through philanthropic motives or as part of public relations efforts. Philanthropic Foundations are usually established by successful individuals or families, and may reflect the varied interests (geographic and thematic) of the founders. Well-known examples in the ARD/SRD field are the Rockefeller Foundation, the Ford Foundation, and the W.G. Kellogg Foundation.

- Corporations often focus giving on the geographic areas where they have factories or significant personnel. Sometimes, funding is tied to initiatives identified by company personnel, or to donations of equipment as manufactured by the corporation.
- The amount of funding is determined by the size of the trust (foundations) or company profits. Generally speaking, grants from foundations are of the order of 10s or sometimes 100s of thousands of EUR.
- Most foundations and companies have very specific procedures for soliciting funding and the content of proposals submitted.
- The larger foundations have regional offices, the smaller ones may operate from global headquarters in America or Europe, etc.
- Rarely do companies support government organizations; some foundations do support specific projects implemented by, e.g. research institutions, etc, although they tend to favour non-governmental institutions.

Non-government organizations are varied in terms of size and scope. Some of the larger ones with an interest in rural innovation are active on a global scale (Oxfam UK, CARE, Tear Fund, World Neighbors, Grain, etc). Others act within specific regions or countries.

- Some donations are tied to religious missions, while others are secular.
- NGOs are financed mostly through individual giving in development countries, and work from a humanitarian motive.
- NGOs generally finance sustainable rural development or disaster relief projects at a communal level.
- Directly finance projects with local organizations and in an ad-hoc manner (although the larger NGOs may coordinate their efforts with national governments).
- The larger NGOs have specialized personnel, and more formal procedures for funding. They are also very involved in lobbying for changes in policy related to international trade, development, etc.

Producers Organizations often are interested in the development of a specific product or group of products. They are interested in increasing the economic well being of their members, and tend to represent the larger, more commodity- and market-oriented producers (e.g. the well-established Coffee Producers Association of Colombia) although international and national level donors are increasingly seeking ways of channelling their funding through producers, including organizations representing small farmers.

7.6.2.2 *Selecting a donor*

When selecting a prospective donor, you should ask the following basic questions:

- Does the work for which you need funding fall within the area of interest (thematic and geographic) of the donor?
- Does the requested amount fall within the range of amounts usually given by the donor?
- Do the policies of the prospective donor allow or normally favour donations to your type of organization?
- Does the prospective donor prefer to share costs with other funding sources, or require matching funds?
- What are the procedures that the donor uses for financing activities? Does it accept non-solicited proposals, or does it prefer to identify its own ideas for funding?

It is a mistake to wait until you have a polished proposal and then look for a somewhere to send it. If the idea of a project or ARD activity did not originate with a donor, you should first identify prospective donors and their interests, discuss the idea of the project with a representative (if possible), or send a short preliminary document (concept note) outlining your ideas. Only when the donor shows (albeit conditional) interest your idea should you seek the formal grant request form or the guide to proposal writing and submission developed by the donor, so that you can submit in the specific format required.

Of course, many competitive funds have specific “calls” for proposals that meet carefully prepared guidelines. In this case, you should ensure that your project proposal meets the objectives of the call, as well as the amounts and any other conditions described.

7.6.3 *Formulating a research & development proposal*

It is usually necessary to prepare proposals in order to get financial support for the implementation of their research and development oriented activities. Increasingly, research funds are being offered in competitive formats or in requests for proposals. Being able to write good research proposals will enable you to compete more effectively for these funds. Moreover, some institutions reward successful proposal writing with career advancement and promotion.

7.6.3.1 *What do donors look for in a proposal?*

Donors or fund managers look for many things in a proposal that is presented to them. Some of the more important questions they ask are shown in Figure 7.6.

Figure 7.6 Elements of a research and development proposal



There are many reasons why donors reject proposals. The common reasons include:

- The proposal does not fall within the objectives of the donor
- The proposal is not well developed
- The budget is not presented well
- The evaluation of the project is not worked out
- The project strategy is not convincing.
- The donor does not have sufficient funds
- The capacity of the organisation that will implement the project, or the qualifications or experience of key persons, is not evident.

You can improve your research proposal by writing it in a simple but direct style. Take out any information that is not indispensable for the donor. Concentrate on the key points you want to get across. The donor, more than anything else, is asking if the organization applying for the funds has the experience and knowledge to implement the project. The donor will evaluate the project in terms of its ability to satisfy the needs of the target group. Often they will want to know if the project can be justified in terms of the development policies in the region.

Try to avoid large and complex research proposals. Remember that donors receive a large number of proposals each year or for each “call”. Therefore, they need to identify rapidly the answers to the questions they use to evaluate proposals.

7.6.3.2 The contents of a proposal

Depending on the size, complexity and context of your proposed project, and the specific requirements of particular funding agencies, your proposal will need to contain some or all of the following elements:

1. Cover Page

The cover page of a proposal normally includes the basic identifying and contact information:

- Title of proposed project
- Dates of operation

- Name of implementing organization
- Contact persons

2. **Executive Summary**

The executive summary (of 2-4 pages, depending on the overall size of the project) may be all that a busy executive can read. It should therefore summarize the most important information of the project:

- Title
- Location
- Duration
- Objectives (Goal, Purpose, Expected Outcomes or Outputs)
- Activities
- Budget (including total cost, solicited amount, expected contributions from beneficiaries, expected contributions from other donors)
- Implementing Institution

3. **Justification**

The justification for a proposal will normally summarise any ARD analyses that have been carried out you have carried out, concerning:

- The perspectives of the different stakeholders involved regarding the problem the project is intended to resolve, or opportunity to be exploited;
- The political, economic, social and environmental context of the problem, and why it has become a priority issue for the proposed beneficiaries;
- How the proposed solution or opportunity will help improve the overall problem situation, any other solutions have been tried beforehand, and why any other approaches or development strategies have been rejected

The details of these analyses should normally be presented in technical appendices or a separate report to a project proposal document.

4. **Objectives**

The different levels of objectives should be clearly specified:

- Goal – the higher development objective to which this project will contribute;
- Purpose – what the project is intended to achieve in the medium term (i.e. during its lifetime or shortly after)
- Outputs – the specific products or “deliverables” expected by the end of the specified period
- Activities – the actions necessary for each output.

The relation between these objectives and any related assumptions should be demonstrated, usually by means of a “logical framework” (see section 7.6.1.4).

5. **Participation of Beneficiaries**

Your proposal should:

- Specify and describe the group(s) that will benefit from the project,;
- Show how the group participated in the development or formulation of the project

6. Organisation

To show how the project will be organised, the proposal should describe

- The institutions and individuals that will implement or coordinate the project;
- The qualifications of these institutions and individuals to implement or coordinate the project (why should these implement this project, and not other competitors?);
- The roles of other stakeholders in the project or proposed activities.

7. Work plan

Specify what the specific activities are, who will carry these out, how they will be carried out, when, and where. A chart with each row representing one activity, and columns representing time periods (days, weeks) – known as a “Gantt chart” - is a useful way to summarize this information.

8. Monitoring and Evaluation

Show how:

- The **progress** of the project will be monitored – the data that will be used to show if activities and outputs are produced on time, where this data will come from, and what interim reports will be produced to show this information and when.
- The **financial disbursement** of the project will be monitored. How often will financial reports be prepared?
- The **success** of the project will be evaluated. What are the indicators that will show if the project purpose has been achieved? Where and how will data on these indicators be obtained? Who will carry out such an evaluation, how, and when?

9. Budget

Constructing a budget challenges you to not only identify costs but also to identify the contributions different organizations can make.

- Contribution of the expected beneficiaries, including direct and indirect costs (e.g. the estimated value of labour, facilities, etc.)
- Contribution of other donors. If possible, show that the project does not depend solely on the financial contribution of one donor. Include indirect costs, such as the value of technical assistance.
- Contributions of government agencies. If the implementing organization receives financial support from the local or national government, calculate and incorporate this in the budget. Examples of such funding might include salaries of personnel (both operational and administrative), office space and training rooms, use of vehicles, and gasoline, etc.

In general, the bigger the contribution of the beneficiaries and other donors, the more successful is your proposal likely to be.

Present the costs of the project on a yearly basis. Clearly separate investment costs from costs of operation (gasoline, money for trips, etc.). Typical budget lines will include:

The budget shown in Figure 7.7 was prepared for a regional women’s project in Mexico financed by a mixture of donor sources:

Figure 7.7 An example of a simple project budget.

Summary of Project Costs by Funding Source (in US \$).

Project Activities	Target Groups	Nation. Governm.	Other Organiz.	Req. Assist.	Total
1. Organisation	22,325	5,400	492	24,100	52,317
2. Prod. & Mark. Handcrafts	47,739	17,178	1,962	4,550	71,429
3. Women's Aspects	27,564	0	4,713	8,750	41,027
4. Basic Needs	163,675	10,471	588	38,465	213,199
5. Training	16,059	3,189	492	20,950	40,690
6. Monitoring & Evaluation	0	4,417	0	8,000	12,417
7. Supervision & Coordination	0	57,717	3,926	21,360	83,003
8. Operational Costs	0	20,514	3,142	10,225	33,881
9. Administration Costs	0	0	0	17,732	17,300
Total Project Activities	277,362	118,886	15,315	154,132	565,695

In addition to the budget table itself, a budget narrative will normally give an explanation of the budget and its components, and show how budget elements coincide with activities in work plan.

10. Technical Appendices

The technical appendices of a proposal should contain the detailed findings of the analytical outputs during the project design. Depending on the size and scope of the proposal, these technical appendices might include:

- A description of the region/communities analysed, and why certain communities were selected for sampling;
- A typology of stakeholders and/or beneficiaries;
- An analysis of the livelihood systems of principal beneficiaries;
- Likely scenarios and desirable strategies to resolve the defined problem or improve the livelihoods of the beneficiary group;
- Any environmental impacts likely, and any mitigating measures needed;
- Economic and financial analysis (changes in income streams, costs/benefits, sensitivity to price changes);
- Social analysis, which stakeholders or social groups will/might gain or lose from the proposed activities, how the interests of women will be integrated, etc;
- Critical assumptions concerning the project logic, and any climatic, economic risks that may occur to reduce the project effectiveness.

7.6.4 Bibliography – proposal development

7.6.4.1 Acknowledgements

This section was written by Richard Hawkins, ICRA, using material prepared for ICRA learning programmes by Nour Sellamna (ICRA) and Uwe Nagel (Humbolt University, Berlin) in section 7.6.1, and by Karel Beekink (Consultant, The Netherlands) in sections 7.6.2 and 7.6.3.

7.6.4.2 Further reading

Internet gateways

Working with the Logical Framework (under duress or by desire). Part of the MANDE (Monitoring and Evaluation) website. <http://www.mande.co.uk/logframe.htm>

Financing ARD. Part of the website of the Technical Centre for Agricultural and Rural Cooperation ACP-EU (CTA). <http://knowledge.cta.int/en/content/view/full/1404>

Seventh Research Framework Programme. List of calls for proposals. <http://cordis.europa.eu/fp7/dc/index.cfm>

The Foundation Center. <http://foundationcenter.org>

Proposal writing short course. From the Foundation Center. <http://foundationcenter.org/getstarted/tutorials/shortcourse/index.html>

Guidelines for Writing a Project Proposal. From the International Development Research Centre (IDRC). http://www.idrc.ca/en/ev-57070-201-1-DO_TOPIC.html

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7.7 Monitoring, evaluation – and learning

7.7.1 Proving vs. improving

The need to monitor and evaluate has always been recognised as an integral part of project development and implementation: monitoring referring to the regular checking of progress to identify adjustments needed during project implementation, and evaluation referring to the assessment of the eventual outcome or impact of the project.

It has also long been recognised that monitoring and evaluation (M&E) has two purposes: accountability – proving the value of the project - and learning – to improve the current and subsequent projects. However, the emphasis of these two purposes has shifted over the years, as stakeholder participation, empowerment and strengthening of civil society have been increasingly recognised as important outcomes of a project in their own right, as well as just mechanisms to achieve a specific outcome such as increased production, food security or farmer income. These differences in emphasis are summarised in Table xx.

It has also been increasingly recognised that these two purposes are not always mutually compatible. An accountability system imposed by project donors or managers, focusing on measurable outputs may in fact detract from the development of processes, stakeholder relationships and partnerships that are difficult to measure quantitatively. So while efforts have been made to develop systems for “participatory monitoring and evaluation” (PM&E), others have tried to develop new systems with a more specific focus on learning and improvement, such as “outcome mapping” (see section 7.7.3 below).

Table 7.1 Changing emphases in monitoring and evaluation systems

	From....	To...
Purpose	Accountability	Learning, improvement, empowerment.
Users	Donors, policy makers and project managers.	Rural stakeholders
Scope	Project	Partnerships
Approach	“Managerialist”	Participatory
Type of intervention	Technical	Institutional
Process	Pre-determined	Flexible, iterative
Level of achievement	Activities, outputs	Outcomes, impact
Focus	Measurable indicators, results and outputs	Processes
Data	Mainly quantitative	Mainly qualitative
Specialist role	Assessor	Facilitator
Output	Report	Understanding

7.7.2 The project M&E approach

A project M&E system is normally based around the logical framework (see Section 7.6.1), which should have clearly identified the project objectives at different levels (e.g. goal, purpose, outputs and activities), as well as the assumptions that link these objectives, the indicators that can be used to verify if these objectives have been met, and the sources where

information on these indicators can be obtained. This type of system can therefore also be called an “outcome-oriented monitoring system”.

The establishment of this type of M&E system is therefore integrated with the design of a project and the development of the logical framework. Linking the M&E to the logical framework brings with it the disadvantages of the logical framework already noted in Section 7.6.1:

- The rigidity of the process (once developed, the framework is rarely adapted or modified in the light of new information and understanding);
- The logical framework is based on a “process chain”, with lower level “outputs”, leading to intermediate level “outcomes”, leading to higher level “impact”. The emphasis on measurable outputs and outcome leads to a focus on things (e.g. increased incomes, increase in yields, credit disbursed, hectares planted, demonstration plots established etc.) rather than people, their relationships and the quality of these relationships which may be more important, but more difficult to assess.
- At the higher levels of objectives (expected outcome, impact), the role and contributions of an increasing number of other stakeholders become progressively more important (either these contributions are included as project activities, leading to a complex project, or they form part of the “critical assumptions” of the project as they are effectively not under the control of the project management).
- With more stakeholders involved, outcomes depend more on the interaction between them (rather than the simple chain of outputs-outcomes), and it becomes more difficult to attributed outcomes to any particular stakeholder or the project itself. Unintended results and outcomes resulting from this interaction are difficult to accommodate in the M&E system.

The above limitations notwithstanding, an outcome-oriented M&E system is often the norm in most project and institutional settings. Including measures to make such a system more participatory, the main steps in establishing such a system include:

- Establish the purpose and scope: what is the purpose of the M&E and how comprehensive should it be?
- Identify performance questions, indicators and information needs: what do we need to know?
- Plan information-gathering methods: how will the needed information be gathered?
- Plan critical reflection processes, events: how will the information be analysed and used, and by whom?
- Identify how the results will be communicated: how and to whom?
- Identify the planning conditions, capacity building and resources needed to implement the M&E system.

7.7.3 Outcome mapping

Outcome mapping (OM) has been developed as a monitoring and evaluation approach to overcome some of the limitations noted in the previous section. OM focuses on the achievement of outcomes, which it regards as “change(s) in the behaviour, relationships, activities, and/or actions of an individual, group, or organization that a programme was helpful in bringing about”. In other words, it focuses on partnerships - the areas where the actions of 2 or more “boundary partners” overlap. OM recognises that although a programme

can influence the achievement of outcomes, it cannot control them because ultimate responsibility rests with the people affected.

Outcome mapping consists of 12 steps in 3 stages:

1. The **first stage - intentional design** - helps a programme clarify and reach consensus on the macro-level changes it would like to support and to plan the strategies it will use:
 - Establish the **vision statement** - what does the programme intend to achieve;
 - Establish the **mission statement** - how will the programme achieve its vision;
 - Identify the **boundary partners** - the individuals, groups, & organizations with whom the programme will interact directly to effect change, and who the programme can influence;
 - Formulate the **outcome challenge** - the changed behaviours (relationships, activities, and/or actions) of a boundary partner, and how they can contribute to the vision;
 - Identify **progress markers** - a graduated set of statements describing a progression of changed behaviours in the boundary partner that will lead to the outcome challenge (e.g. what are the changes you expect to see, like to see, love to see);
 - Construct **strategy maps** – a combination of strategies or activities aimed at the boundary partner (outputs, new skills, support needs), and the environment of the partner (“rules of the game”, information availability, networking, etc);
 - Identify those **organisational practices** that determine an organisation’s effectiveness, that foster creativity and innovation, assist partners and maintain the organisation’s “niche”.
2. The **second stage – outcome and performance monitoring** - provides a framework for the systematic collection of data, within the context of a regular learning and improvement cycle that encourages the programme and partners to challenge themselves.
 - Establish **monitoring priorities** – what (information), who (will collect, use it), when (should it be collected), how (will it be collected, used) etc. This information is then collected by the following 3 tools:
 - The **outcome journal** – to monitor the achievement of the progress markers and hence changed behaviours hoped for;
 - The **strategy journal** – to monitor the effectiveness of the strategies and activities being used to modify the behaviour of the boundary partners and feed back into planning of new activities;
 - The **performance journal** – to record data on how the programme is operating as an organization to fulfil its mission
3. The **third stage - evaluation planning**, helps the programme set evaluation priorities so that it can target evaluation resources and activities where they will be most useful. An evaluation plan outlines the main elements of the evaluations to be conducted.

- The **evaluation plan** identifies who will use the evaluation, how and when, what questions should be answered, what information is needed, who will collect this information, how and when, and how much it will cost.

In summary, outcome mapping builds on the more conventional M&E approaches, but recognises the difficulty of attributing impact to any one agency, the more systemic (less linear) nature of causes and effects in an innovation system, and focuses on outcomes in terms of changes of behaviour of key stakeholders working in partnership.

7.7.4 Critical reflection and learning

The basis for all experiential or action learning is reflection on experience as a basis for understanding (forming abstract concepts) and planning future actions, in a continuous cyclical process (see section 3.2 on experiential and action learning).

“Critical reflection” is therefore the process of interpreting experiences or data to create a new understanding (insight) as a basis for planning future actions. In this sense it goes from the specific to the general, and back to the specific.

- **Experience** - what happened, in terms of specific events that helped or hindered achieve planned activities and outcomes;
- **Relevance** – what general rule or guideline can be formulated from the experience? How does this compare with current rules or understanding?
- **Implication** – for the project, programme or institution, in terms of strategy, management, organisation, regulations, culture, etc.
- **Actions needed** – what, by whom, when, how?

Breaking down the reflection process and documenting these 4 steps therefore promotes experiential/ action learning, and should underpin any M&E system that aims to promote learning as well as accountability.

Whatever the mechanism for monitoring and evaluation, reflection and learning will not happen unless there is a conducive institutional environment to encourage this. It is therefore important to create an institutional culture of learning, where:

- Time and space for exchange, reflection and learning is considered valuable use of staff resources;
- Documentation of process, experiences in working with other stakeholders, is seen as important as the documentation in technical / scientific outputs;
- Individuals share the institutional vision, goals, and feel motivated to help achieve these;
- Individuals feel that ideas and suggestions are valued;
- Critical reflection on personal, team and institutional progress is recognised in job description, performance assessment;
- Knowledge is shared, rather than hoarded as a means of increasing personal power;
- The question “why?” is not discouraged or taken as institutional subversion;
- Mistakes and failures are seen as opportunities to learn, rather than something that has to be blamed on someone and therefore to be hidden or denied;
- Communication from subordinates to managers is encouraged, and where managers listen to their staff;

- The benefits of working with other stakeholders are seen as outweighing the loss of institutional control and autonomy involved.

Creating the right institutional environment for learning should therefore be at the forefront of institutional change, if ARD is to achieve its potential as a collective learning process.

7.7.5 Bibliography – monitoring, evaluation and learning

7.7.5.1 *Acknowledgements*

This section was written by Richard Hawkins, ICRA, using material from sources cited below.

7.7.5.2 *References*

Guijt, I. and J. Woodhill (2002), *Managing for Impact in Rural Development: A guide for project M & E*. International Fund for Agricultural Development (IFAD), Rome, Italy. Available at: www.ifad.org/evaluation/guide/index.htm

Earl, S., Carden, F., and T. Smutylo (2001), *Outcome Mapping: Building Reflection and Learning into Development Programs*. International Development Research Centre, Canada. Available at: www.idrc.org/evaluation/ev-9330-201-1-DO_TOPIC.html

7.7.5.3 *Further reading*

Internet Gateways

Monitoring and Evaluation News. Managed by Rick Davies. <http://mande.co.uk/>

Evaluation. IFAD website. <http://www.ifad.org/evaluation>

Participatory Planning, Monitoring and Evaluation. Managing and Learning for Impact in Rural Development. Resource Portal of the International Agriculture Centre, Wageningen University Research, The Netherlands. <http://portals.wi.wur.nl/ppme>

Outcome Mapping Learning Community. www.outcomemapping.ca

Tools and methods for M&E. Page from the "Institutional Learning and Change" (ILAC) initiative of the CGIAR. www.cgiar-ilac.org/content/tools-and-methods-me

UNICEF M&E Training modules. www.ceecis.org/remf/Service3/unicef_eng