

NATIONAL POLICY ON EXTENSION AND ADVISORY SERVICES



**agriculture,
forestry & fisheries**

Department:
Agriculture, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

National Policy Approved by Cabinet ~ October 2016

Edited, printed and published by

Department of Agriculture, Forestry and Fisheries

Design and layout by: OH Frewin (Pty) Ltd

Directorate: National Extension Reform

Private Bag X144, Pretoria, 0001

ISBN: 978-1-86871-453-7

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Part A: General Information



ACRONYMS

ADC	Agricultural Development Centre
AgriBEE	Agricultural Black Economic Empowerment
AgRISETA	Agricultural Sector Education and Training Authority
AGIS	Agricultural Geographic Information System
ARC	Agricultural Research Council
BBBEE	Broad Based Black Economic Empowerment
CASP	Comprehensive Agricultural Support Programme
DAFF	Department of Agriculture, Forestry and Fisheries
DEA	Department of Environmental Affairs
DED	Department of Economic Development
DRDLR	Department of Rural Development and Land reform
DSD	Department of Social Development
ERP	Extension Recovery Plan
ESP	Extension Service Providers
FAO	Food and Agriculture Organisation
GADI	Grootfontein Agricultural Development Institute
IFSNP	Integrated Food Security Nutrition Programme
HEI	Higher Education Institution
ICT	Information Communication Technology
IDP	Integrated Development Plan
IGDP	Integrated Growth and Development Plan
IGR	Inter-Governmental Relations
ISRDS	Integrated Sustainable Rural Development Strategy
LEO	Local Extension Office
LMADC	Local Municipal Agricultural Development Centre
LRAD	Land Redistribution for Agricultural Development
NDP	National Development Plan
NGO	Non-Governmental Organisation
NGP	National Growth Path
NPO	Non-Profit Organisation
OBO	On Behalf Of
PDAs	Provincial Department of Agriculture
SACNASP	South African Council for Natural and Scientific Profession
SETA	Sector Education and Training Authority

Foreword by the Minister



Mr Senzeni Zokwana (MP)
Minister of Agriculture, Forestry
and Fisheries

The dawn of the 21st century heralded further inevitability and prominence of information technology and the critical role it plays to stimulate economic growth. The attainment of South Africa's developmental state agenda will be incomplete without the full participation of the previously marginalised groups who want to become producers. The successful participation of the household and smallholder producers in the mainstream of the economy is contingent upon adequate provision of appropriate Extension and Advisory Services.

Vision 2030, through the National Development Plan (NDP), expects the agricultural sector to create a million jobs, a mammoth target that requires concerted efforts across the sector. The inclusion of Revitalisation of the Agriculture and Agro-processing Value Chain (RAAVC) in the government's Nine Point Plan demonstrates the vigour and speed with which the Department of Agriculture, Forestry and Fisheries (DAFF), through its myriad of programmes, should accelerate its effort to meaningfully contribute towards socio-economic transformation.

The Extension and Advisory Services serve as a crucial catalyst that will aid producers in the sector to realise their optimum potential which will not only resultantly culminate into increased creation of jobs and eradication of poverty, but will also fundamentally ensure sustainable food security in the country.

It is my wish that the intervention measures of the National Policy on Extension and Advisory Services will enhance the standards of the South African Agricultural Extension Systems and for the services to be prioritised given their importance on productivity. Thus more support should be geared towards galvanising resources towards invigorating the Extension and Advisory Services of the department. I have no doubt that this National Policy on Extension and Advisory Services, which is long overdue, will help deepen and demonstrate our commitment towards producers without whom our food sovereignty would be compromised. This will also help to position the Extension and Advisory Services in the country as a centre of excellence to be emulated by other countries.



Mr Serzeri Zokwana(MP)

Minister of Agriculture, Forestry and Fisheries

Statement by the Deputy Minister



Mr Sfiso Buthelezi
Deputy Minister of Agriculture,
Forestry and Fisheries

The provision of effective and efficient Extension and Advisory Services is undoubtedly sacrosanct in the course to advance agrarian reform. The importance of the afore-mentioned services cannot be over-emphasised since the future of the sector is anchored upon it. The sector is epitomized by an abundance of opportunities that should be enhanced in the endeavour to create a new generation of producers that will ensure that there is access to adequate, affordable and safe food for all.

Although the World Bank reported that poverty rate dropped from 46.2% to 39% in 2014 due to grants, free basic services and taxes favouring the poor, South Africa continues to experience worrisome levels of poverty, which is the principal cause of hunger. According to StatsSA Poverty Report, in 2016 about 13.7 million South Africans have severely inadequate access to food and were extremely vulnerable to hunger.

The status quo cannot persist to exist, consequently there is a fundamental requisite to amplify the strategic role of the Extension and Advisory Services particularly in advancing the course for economic transformation in the sector which will aid, inter alia, to eradicate the alarming poverty, unemployment and inequality levels in the country.

Unequivocally, there is a need for a broader and effective policy framework that provides a coordinated approach and acknowledges the significance of the Extension and Advisory Services in respect of technology transfer, information sharing and skills development, particularly of smallholder producers across the agriculture, forestry and fisheries sector.

This policy framework serves as a primary cornerstone through which household and small holder producers can graduate to Medium Scale Commercial producers.



Mr Sifiso Buthelezi

Deputy Minister of Agriculture, Forestry and Fisheries

Overview by Director General



Mr Mike Mlengana
Director-General: Agriculture,
Forestry and Fisheries

Since 1994 the Department of Agriculture, Forestry and Fisheries (DAFF) has invested its energy on improving the standard of Extension and Advisory Services in the country. The Norms and Standards for Extension and Advisory Services were developed in 2005. The main objective was to improve the efficiency, relevance and cost effectiveness of publicly funded Agricultural Extension and Advisory Services. The Extension Indaba which was held in 2008 resulted in to the development of the Extension Recovery Plan (ERP), with the aim of revitalisation the state of Extension and Advisory Services in South Africa. Although there are a number of regulatory initiatives and strategies aimed at ensuring improved Extension and Advisory Services, the lack of a national policy framework means that the implementation of these strategies has been limited to provincial and individual stakeholder decisions. Extension and Advisory Services in South Africa remains unregulated and fragmented. The Department of Agriculture, Forestry and Fisheries (DAFF) identified an urgent need to embark on the development of the National Policy on Extension and Advisory Services.

The policy advocates for a pluralistic approach. A variety of Extension Service Providers (ranging from public, private and Non Profit Organisations) are already involved in rural development initiatives. DAFF acknowledges that a major part of reforming extension will include a greater coordination and collaborative efforts between the different institutions that provide Extension and Advisory Services. This kind of collaboration and co-ordinated approach must equally apply

to research, technology development and innovation processes such that a pluralistic 'complex' of researchers and extension practitioners from public, private and NPO's exist. This enables Provincial Departments of Agriculture to provide a holistic, well co-ordinated and collaborative approach for different actors to play a key role in the delivery of Extension and Advisory Services.

This policy is aimed at setting a regulatory framework to guide the agriculture, forestry and fisheries sectors in the provision of Extension and Advisory Services. The goal of the policy is to ensure that all actors in the agriculture, forestry and fisheries value chains (from producers to processors) enjoy equitable and optimum access to knowledge and skills, and have the capacity to explore opportunities for the advancement of their enterprises and livelihoods.

This policy endorses the commodity value chain development approach that brings industry leaders from different nodes of the value chain together. This approach is aligned with the Nine Point Plan key presidential priorities, more specifically the Revitalisation of the Agricultural and Agro-processing Value Chain (RAAVC). RAAVC include key role players such as input suppliers, researchers, producers, processors, retailers, exporters, government and others to build a shared understanding of their competitive position and create consensus on how to improve it and put plans into actions. Successful establishment of institutional implementation mechanisms of this policy will lead to effective and efficient delivery of Extension and Advisory Services in the country.



OBO
Mr Mike Mlangana

Director-General: Agriculture, Forestry and Fisheries

Definitions

Accountability: Obligation to demonstrate that work has been conducted in compliance with agreed rules and standards or to report fairly and accurately on performance results vis à vis mandated roles and/or plans.

Advisory Services: The term 'Advisory Services' is used interchangeably with extension and is very much part of extension. It refers to services provided by subject matter specialists, private organisations or firms to support producers. It is commonly practised where agriculture, forestry and fisheries enterprises are highly commercialised.

Efficiency: A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted, i.e. are the objectives being achieved economically by the development intervention? How big is the efficiency or utilisation ratio of the resources used?

Effectiveness: An aggregate measure of (or judgment about) the merit or worth of an activity, i.e. the extent to which an intervention has attained, or is expected to attain, its major relevant objectives efficiently in a sustainable fashion and with a positive institutional development impact.

Evaluation: The systematic and objective assessment of an on-going or completed project or programme, its design, implementation and results. The aim is to determine the relevance and fulfilment of objectives, development efficiency, effectiveness, impact and sustainability.

Equity: Refers to fairness and equal outcomes in terms of gender, race and class.

Facilitation: Refers to attempts to move away from traditional one-way technology transfer assumptions, to instead view extension as a collection of mechanisms by which to support producers in their own ongoing efforts to access new technologies, markets, and services (this creates conditions for a broader flow of information).

Food Security: Food security is a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.

Goal: The higher order objective to which a development intervention is intended to contribute.

Government: This refers to the national Department of Agriculture, Forestry and Fisheries, Provincial Departments of Agriculture and local government and state-owned enterprises.

Impact: Final intended outcomes with respect to benefits accruing to the target population and/or broader economy, i.e. does the development intervention contribute to reaching higher level development objectives?

Indicator: Quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor.

Inputs: Financial, human and material resources used to perform activities.

Monitoring: A systematic collection of data on specified indicators to provide management and the main stakeholders of an ongoing development intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds.

Outcome: The likely or achieved short-term and medium-term effects of an intervention's outputs.

Outputs: Immediate results derived from the activities of the project: Products, capital goods and services which result from a development intervention; may also include changes resulting from the intervention which are relevant to the achievement of outcomes.

Privatisation: Transfer of power to private hands (e.g. private sector).

Stakeholders: The private sector, development partners and interested and/or affected parties in as far as it applies to agriculture, forestry and fisheries.

Sustainability: The continuation of benefits from an intervention: The probability of continued long-term benefits. The resilience to risk of the net benefit flows over time (i.e. are the positive effects or impacts sustainable).

Surveys: Data collection techniques designed to collect standard information from a large number of subjects. Surveys may include polls, mailed questionnaires, telephone interviews, or face-to-face interviews.



Part B: Policy Intervention Measures





Forestry



1. INTRODUCTION

The development of the National Extension and Advisory Services Policy for Agriculture, Forestry and Fisheries has become a matter of priority for the department. A number of challenges with regard to the coordination of extension and advisory services must be addressed urgently to enhance and maintain the required pace of rural development. The lack of a national framework for extension and advisory services creates unnecessary confusion with regard to the roles and responsibilities of different stakeholders on service delivery. Therefore, it is imperative to establish a national policy for effective and efficient delivery of extension and advisory services in South Africa.

This policy aims to set a regulatory framework to guide the agriculture, forestry and fisheries sectors in the provision of extension and advisory services. Historically, extension services excluded a large number of support services rendered by subject matter specialists, all of which provide important and critical services to producers and processors. Recognition of the entire spectrum of services rendered to producers and processors therefore provides a basis for broadening extension services, hence the appellation 'extension and advisory services'.

This policy is an outcome of research across a broad spectrum of sources and consultations with diverse stakeholders. The policy supports the implementation of the Integrated Growth and Development Plan (IGDP) for Agriculture, Forestry and Fisheries and Agricultural Policy Action Plan (APAP). It is drafted in recognition of the need for a coherent plan of action to direct the collective work of the state, private, non-profit organisations (NPO) and different producer agencies that are, in one way or another, engaged in promoting the agriculture, forestry and fisheries sectors. The three sectors make important contributions to South Africa's society, culture and economy. These sectors rely heavily on the nation's natural resources and have a significant impact on the country's environmental status.

Since 1994, there has not been sufficient improvement in the lives of the vast majority of South Africans engaged in agriculture, forestry and fishing. Inadequate access to the factors of production, markets, finance and to infrastructure continues to hamper the advancement of the three sectors and the people working within them. Furthermore, the many transformational policies such as Broad Based Black Economic Empowerment (BBBEE), land reform policy, market reforms and policies intended to correct disparities of the past have all struggled to achieve their intended results within the agriculture, forestry and fisheries.

Clearly there is an urgent need to bring all these many important elements together under an all-embracing and practical policy that will enable those working on the front line, and those reinforcing their work with technical, financial and managerial advice and support, to build on the progress made by previous extension strategies (including Norms and Standards for Extension and Advisory Services, Extension Recovery Plan, and Food and Nutrition Security Policy). The policy provides a

common framework and a set of principles to achieve shared over-arching objectives and priorities set out in the 2012 IGDP and the National Development Plan (NDP): a) to eliminate poverty and reduce inequality by 2030; b) bring about accelerated economic growth, higher investment and greater labour absorption, and c) raise living standards.

2. PROBLEM STATEMENT

The vision for agriculture, forestry and fisheries as identified in the Integrated Growth and Development Plan (IGDP, 2012) is to achieve equitable, productive, competitive, profitable and sustainable agriculture, forestry and fisheries sectors that are growing to the benefit of all South Africans. Agriculture, forestry and fisheries have been identified among the sectors with the highest potential to make an immediate and sustainable contribution towards job creation in rural areas (DAFF, 2013). Since 1994, efforts have been made in all three sectors to address the disparities and inequities, to create broader access to services and markets. Land reform, targeted economic empowerment programmes, credit schemes and several other initiatives were instituted to attempt to bring equity and more broadly based prosperity. Various Acts addressing agriculture, forestry and fisheries were passed and implemented. While progress has been made, the agrarian system still reflects the disparities of the past with many rural people remaining on the economic margins.

Efficient and effective extension and advisory services can broker and facilitate information sharing and skills development in agriculture, forestry and fisheries, especially for smallholder entrepreneurs. In its current form, public extension services cannot facilitate the accelerated capacity development of a range of producers that is desired to address challenges of rural and economic growth, food and nutrition insecurity, inequality and unemployment. National extension services in the country are plagued with a number of structural and counterproductive challenges that limit the efficiency and effectiveness of efforts and investments in the development of smallholder producers in particular. **The following are some of the major challenges:**

2.1 Poor Linkage between Research, Extension and Producers

Research is a major input and continuous improvement ingredient to cutting-edge agricultural development innovation and is crucial to ensuring a diverse, resilient, productive and sustainable agricultural sector. However, often than not, the flow of information between researchers and producers is not as efficient and effective as it should be. Ensuring efficient flow of technological innovations between the researchers, extension and producers can only be achieved through the development of an efficient researcher, extension and producer agent linkages. This however is also true for the need of the opposite flow of information. In essence researcher-extension-producer interactions constitute triangular relationships, where information and innovation flows both ways. Extension practitioners and researchers in particular need to continuously recognize and take into account indigenous knowledge systems and the whole portfolio of livelihood strategies of the target groups when rendering services. The poor linkage still remains one of the major challenges

within the agriculture, forestry and fisheries sectors in South Africa where research, extension and producers are at best disintegrated.

2.2 Low Extension to Producer Ratio

One of the major challenges for extension relates to the lack of extension capacity. The democratisation process and land reform policies of the South African Government emphasise the need to also transform extension services. Smallholder producers became more important under the new land reform and development policies. South African agriculture is distinctively characterised by commercial and smallholder producers which creates a dual system even in the provision of extension and advisory services. The challenge then for the new vision for South African agriculture is to merge the two, such that both groups equally benefit from the available set of services in the sector. The demand for extension and advisory services varies according to the nature of the farming practices (i.e. crop farming, livestock farming or mixed farming systems involving both crops and livestock) and farm size. Communities with a high number of producers on a subsistence level are currently serviced through a low extension producer ratio, while market oriented large scale producers are serviced through a high extension ratio (DAFF, 2006). This ratio is further blurred by the increase of smallholder farmers due to land redistribution and agricultural development policies and the fact that the target group among farming communities is often poorly defined, thus leading to the assumption that everyone that lives in rural areas is a producer, which creates more pressure for extension and the perception that public extension services are ineffective and inefficient.

2.3 Disintegrated Efforts from Different Extension Support Agencies

In South Africa there are a number of state, private and civil society institutions that provide extension support to producers at different stages of the value chains. Each of these institutional groupings is further disintegrated at the level of the different classifications. While these institutions invest and contribute in small and varied ways to the overall development of producers across the country, their efforts have not been able to make much impact on the overall picture of South African smallholder producers.

2.4 Lack of a National Policy and Regulatory Framework

Although there are a number of regulatory initiatives and strategies aimed at ensuring improved extension and advisory services, the lack of a national policy framework means that the implementation of these strategies has been limited to provincial and individual stakeholder decisions. Extension and advisory services in South Africa remain unregulated and fragmented. Although the Norms and standards for Extension and Advisory Services in Agriculture (DAFF, 2005) and the National Framework for Extension Recovery Plan (DAFF, 2011) already present a good foundation for extension and advisory services reform in South Africa, it is well noted that they focus on agriculture and are silent about forestry and fisheries sub-sectors.

South Africa does not have a regulatory framework within which the delivery of extension and advisory service takes place. Extension Service Providers (ESPs) have no formal guidelines, governing code of ethics and working standards. The practice therefore, is for every ESP to apply what they regard as appropriate. Consequently, some providers venture into extension services without adequately trained personnel and/or the pre-requisite extension working tools, thereby adversely affecting the quality of services offered. Clients need assurance that the extension service they receive is of high quality. In a pluralistic extension delivery environment, all stakeholders need to know that the extension resource is used efficiently and with synergy rather than duplication, overlap or omission. Clients should be protected from receiving contradictory information and advice, particularly those that adversely affect them or their enterprises.

2.5 Limitations in the Extension Education System and Narrow Service Focus

Extension and advisory services face major challenges in the areas of relevance, efficiency, accountability and sustainability. The changing economic scenario in South Africa and the need for appropriate agricultural technologies as well as the need for innovative and climate resilient production practices to respond to rising food prices, food and nutrition security, poverty eradication, diversifying market demands, export opportunities and environmental concerns, is posing a new set of challenges to technology dissemination systems. Extension and advisory services must respond to a wide set of local, national and global pressures to the agriculture, forestry and fishery sectors across the value chains. Extension is part of a wide range of services needed to help producers acquire relevant knowledge and skills to increase and sustain the productivity and competitiveness of their enterprises.

Extension and advisory services lack a developmental and systems approach, where practitioners have a holistic view and understand the total value chain and linkages. Moreover, a major part of the extension and advisory services administered by DAFF and PDAs is focused on agriculture, thus the need to broaden the current scope towards a wider focus on forestry and fisheries with stronger emphasis on societal-wide sustainable economic development initiatives. This presents a great opportunity for extension practitioners to also put more emphasis in supporting producers on diverse rural livelihood initiatives based on a wider understanding of the overall development context and socio-economic objectives. Equally, this poses a new challenge for the education and training curriculum for extension practitioners. Thus the justification for a multidisciplinary approach to training that capacitates current and future extension practitioners and advisors with the relevant and diverse knowledge and tools to deal with and address the wider rural livelihood context of extension support.

Agrarian transformation programmes have thus not achieved the desired progress and where technical progress has been made, such as in land transfers and restitution, post-transformation issues have often presented new problems and challenges that impede real transformation. Communities settled under land reform initiatives are often ill-equipped to work the land or engage

their land economically. Communities to which state forests have been transferred also lack support services and face numerous problems that exclude them from effective participation in the forestry sector. Similar issues of access and post-access operational capacity are also found in the fishery sector.

Extension reform in South Africa equally calls for the re-alignment of extension and advisory services in terms of the constitutional framework. While the three sectors have been grouped together under DAFF, forestry and fisheries still remain national legislative competencies while agriculture is an area of concurrent (national and provincial) legislative competence. This presents a challenge for the effective and efficient implementation of the policy, particularly at provincial level with regards to forestry and fisheries.

3. RATIONALE

As early as the 1990s, the Food and Agriculture Organisation (FAO) of the United Nations' Global Consultation on Agricultural Extension recommended that governments develop and periodically review their agricultural extension policies. The well-being of the rural population is invariably linked to the performance of the agricultural sector and to the sector's ability to cope with the challenges that result from rising population pressures, changing demand for food and agricultural products, resource scarcity, climate variability and climate change and greater production uncertainty. Extension and advisory services are an integral component of ensuring the efficient facilitation of government development programmes in rural areas. In its current form extension and advisory services indirectly limit rather than facilitate the implementation of agricultural development policies and programmes as instruments designed to eradicate poverty, food and nutrition insecurity, facilitate job creation and improve livelihoods and household income. This justifies an urgent need for targeted and visionary reform of extension and advisory services as an effort to ensure their effectiveness and relevance to the country's agriculture, forestry and fishery sectors' development needs.

Since 1994, numerous Acts, policies, and strategies have been developed and implemented at national and provincial levels. The strategic intent was to redress the disparities inherited from the apartheid era and to foster equitable access to all South Africans, with a particular emphasis on previously marginalised black smallholder producers. A number of problems and challenges with regard to the coordination of extension and advisory services need to be addressed urgently in order to enhance and maintain accelerated rural and agrarian development. While focusing on addressing the identified problems and limiting factors to extension and advisory services, this policy framework also responds to the needs and actual role of extension to facilitate knowledge transfer and skills development for productive, competitive and sustainable (socially acceptable, economically viable and ecologically sound) agriculture, forestry and fisheries. This effectively means an objective focus on the development of these sectors rather than just addressing the problems and limiting factors to efficient extension and advisory services.

It is therefore government policy to broaden access to financial, human, physical and natural capital assets for smallholder producers and improve research outputs and access to efficient value chain-focused extension and advisory services. The development of a comprehensive and integrated extension and advisory services policy in South Africa is one of the prerequisites to facilitate the establishment of an efficient extension and advisory system that can contribute to increased productivity and farm income while ensuring equitable and sustainable improvements and growth. Many private sector businesses, commodity groups and non-profit organisations are currently engaged in extension and farmer support throughout the country. This, however, creates a fragmented collection of services that do not share a common vision or a set of guiding principles and criteria, and therefore cannot make the necessary headway in these sectors that remain such a vital part of South African society.

This presents an excellent opportunity for a holistic well-facilitated and collaborative approach to develop, improve, implement and monitor extension and advisory services strategies, norms and standards while creating a coordinated platform and space for different actors to play specific roles in the development of a prosperous and sustainable agriculture sector. The strength of an effective extension and advisory service lies in the ability of all role-players, stakeholders and service providers in the sector to work together and share knowledge and information. This will ensure that the combined capacity and knowledge base within the public, private and non-profit actors can be synergised and channelled towards the advancement of the agriculture, forestry and fisheries sectors. Therefore, government should facilitate extension and advisory services that are pluralistic; recognising that there are roles for the state, the private sector, non-profit organisations and for producers themselves in delivering services. Decentralisation and pluralism are preconditions for extension to take on a facilitation approach and to become directly accountable to clients at field level.

Moreover, extension can provide researchers with an essential reality check for understanding how producers and other market actors are searching for and using new technologies. Extension and research should inform policy-makers about how food security initiatives are impacting on different target groups and how man and women producers are struggling with their own household food security while, looking for ways to enter new markets.

4. GOALS, OBJECTIVES AND CORE PRINCIPLES

This policy aims to facilitate the establishment of effective and efficient extension and advisory services to ensure knowledge transfer and skills development as the foundation for equitable, productive, competitive, profitable and sustainable (socially acceptable, economically viable and ecologically sound) agriculture, forestry and fisheries sectors in South Africa.

The goal of the policy is to ensure that all actors in the agriculture, forestry and fisheries value chains (from producers to processors) enjoy equitable and optimum access to knowledge and skills, and have the capacity to explore opportunities for the advancement of their enterprises

and livelihoods. This policy responds to economically viable needs, ambitions and circumstances expressed by users, which are linked to participatory, shared research and learning through combined efforts of extension and advisory services practitioners, producers and processors.

4.1 Strategic Objectives

The policy aims and goals will be achieved through the following **strategic objectives**:

- I. To ensure effective linkages and exchange of information between research, extension and producers;
- II. To establish a professional, accessible, reliable, relevant and accountable national extension and advisory service that is results oriented;
- III. To ensure a pluralistic and coordinated approach for the provision of extension and advisory services by public, private and non-profit organisations;
- IV. To transform and align the core competencies of extension practitioners towards the comprehensive development agenda; and
- V. To promote and implement the value chain approach for integrated and holistic support services.

4.2 Core Principles

The National Extension and Advisory Services Policy commits South Africans to the following:

I. Poverty eradication

Extension and advisory services must make an effective contribution to national efforts of poverty eradication and food and nutrition security for all.

II. Equity

All actors (young and old, men and women and people with disabilities) in the agriculture, forestry and fisheries value chains are entitled to extension and advisory services.

III. Prioritising production and income opportunities

Extension and advisory services must stimulate production and income opportunities for disadvantaged producers and processors and support them in optimising the performance of their enterprises.

IV. Promote sustainability

Extension and advisory services must promote sustainable development practices (socially acceptable, economically viable and environmentally friendly) and ensure the graduation of producers towards self-reliance.

V. Pluralistic and integrated extension and advisory services

The policy commits South Africa to a pluralistic integrated approach that optimises and harmonises the extension and advisory roles and contributions of government, the private sector, NPOs and producers. This will ensure combined extension and advisory services capacity through partnerships, collaboration and integration between actors.

VI. Trustworthiness, integrity and efficiency

Extension and advisory services must be trustworthy and uphold integrity and professionalism through the provision of scientifically proven and ethically defensible advice while ensuring effective and efficient services.

VII. Strong link between research, extension and producers

The agenda for research, extension and advisory services programmes must respond to the economically viable needs expressed by producers' ambitions and circumstances. This must be facilitated through strong linkages between producers, extension and research.

5. POLICY CONTEXT AND SCOPE

This policy applies to extension and advisory services for agriculture, forestry and fisheries sectors in all rural and urban areas of South Africa. It covers all scales of production and processing by all South Africans, regardless of their socio-economic background or status, their level of income, their degree of livelihood dependence on these sectors, or the degree of their engagement within commodity value chains. It applies to all modes of extension and advisory service delivery, by government, the private sector, NPOs, producer organisations and commodity groups. This policy is aligned with the National Growth Path (NGP) and National Development Plan (NDP).

For the purpose of this policy, extension and advisory services refer to the active collaborative engagement of all stakeholders, actors and role-players involved in the agricultural, forestry and fishery value chains, to support wise decision-making about the socially, economically and environmentally sustainable use of resources in the pursuit and advancement of their livelihoods to ensure the optimal contribution of each sector to the economy and the welfare of society.

Active collaborative engagement includes, among other things, facilitating access to knowledge, information and technologies, fostering learning and practical partnerships, and assisting all parties to develop their technical, organisational and management skills and practices. Participants include primary producers, extension practitioners, researchers, agri-businesses, processors, education and other relevant institutions.

Extension and advisory services in this policy focus on the provision of services that respond to users' expressed economically viable needs, ambitions and circumstances, which are linked to

participatory, shared research and learning through combined efforts of extension and advisory personnel, producers and processors. Those involved in providing extension and advice play a facilitation role to assist producers and processors develop or otherwise find relevant advisory services and to access network and facilities essential to the enhancement of farm productivity, securing finance and markets.

The desired ultimate impact of any engagement with extension and advisory services is to share knowledge and strengthen individual and collective capacity to work with greater self-reliance and confidence. This enables producers and processors to contribute and to benefit from the prosperity of South Africa while pursuing their chosen livelihoods.

The modern strategy for extension and advisory services is pluralistic, recognising that there are roles for the state, the private sector, NPOs and for producers themselves in delivering services. The new approach thus reflects a reduced operational role for the state which, in addition to providing policy direction, appropriately fills certain extension and advisory niches, but leaves other functions which can be better performed by the private sector and NPOs through public-private partnerships and by producers and commodity groups themselves.

Global trends in extension and advisory services emphasise the need for new thinking about how best to deliver extension and advisory services. In South Africa this policy represents the first step in that direction. This policy reflects current economic, environmental and social realities and aspirations, and assigns appropriate roles to all elements of society engaged in agriculture, forestry and fishery sectors.

The policy commits South Africa to delivering and maintaining a pluralistic, harmonised, co-ordinated extension service for agriculture, forestry and fisheries sectors that operates on a common set of principles and values, and which responds to the needs, aspirations, opportunities and other circumstances of the many actors in the respective value chains. The policy also recognises the overall rural livelihood context within which extension and advisory services occur and thus commits to the support of producers on the wider rural livelihood system and sustainable development initiatives.

5.1 Role of Extension and Advisory Services

The role of extension and advisory services is to assist producers make efficient, productive and sustainable use of their land and other agrarian resources, through the provision of information, advice, education and training. Extension and advisory services contribute to accelerated technological, social and economic development. In particular, effective extension and advisory services:

- Assist producers and processors to identify and overcome production, enterprise and marketing challenges, through the exchange of information among producers, extension practitioners, input suppliers, creditors and marketing agents.

- Empower and build capacity of producers, producer organisations and commodity groups to ultimately become self-reliant for improved living standards.
- Assist producers and processors to access relevant advisory services and facilities that are essential for the enhancement of farm productivity, securing finance and markets.
- Support producers to implement climate smart agricultural production systems (mitigate, adapt and increase productivity and resilience).
- Provide information to research institutions on producers' production constraints so that appropriate basic, applied or adaptive research can be conducted.
- Share knowledge and strengthen individual and collective capacity to work with greater self-reliance and confidence.
- Implement, monitor and evaluate national policy, programmes and projects on extension through DAFF or its designated party.
- Create a favourable environment for the development of multi-sectoral collaboration and partnerships between stakeholders.
- Provide technical advice and mentorship as well as general management support for improved decision making.
- Promote the efficient and sustainable use of productive resources and technologies.
- Advance the development of human and social capital by proactively responding to producers' expressed needs.
- Enhance the capacity of producers through the facilitation and/or provision of ongoing training services for the development of comprehensive skills.
- Facilitate and support the establishment of commodity groups.
- Support producers to adopt measures aimed towards reducing the impact of natural hazards.
- Work with producers in technology development and innovation processes.
- Support producers on diverse rural livelihood initiatives based on a wider understanding of the overall development context and socio economics objectives.

5.2 Core Extension Methods

Effective implementation of this policy requires mutual understanding and commitment by the full complement of service providers (including producers and processors, the state, the private sector or non-profit organisations). This approach will make a vital contribution in enhancing productivity, ensure food security and reduce poverty and vulnerability.

There is no single extension model or approach suited to all situations in South Africa. Approaches and methods must be adapted to local situations and conform to the aforementioned principles for different methods and extension approaches (please refer to the Norms and Standards for Extension and Advisory Services, June 2005). The choice and combination(s) of extension methods for implementation of the policy must be dictated by the prevailing conditions.

With a multiplicity of service providers, coordination is essential to ensure quality and adherence to minimum norms and standards. PDAs should establish a directorate for extension and advisory

services in order to focus and coordinate these state services in an effective, harmonised and recognised manner since not all provinces have well established directorates for extension and advisory services. The directorate will be responsible for the design and implementation of the respective provincial extension and advisory services strategies for the advancement of the agriculture, forestry and fisheries sectors. This will ensure the provision of appropriate professional, financial and administrative support to personnel and the overall extension and advisory function. DAFF will provide support to the provinces to establish provincial extension forums and other appropriate units thus ensuring provincially integrated service delivery. PDAs should coordinate (through extension forums) the various types of service providers aligning them with the community institutions (e.g. local municipalities or farmer organisations).

Existing structures, such as producer organisations and/or commodity groups should be used and partner with government structures (local and district municipalities) to act as overarching forums that takes responsibility for development initiatives and commissioning projects. Flexibility and adaptation to meet situation specific circumstances is important. This is coordinated with the understanding that not all community and/or producer challenges can be resolved by extension practitioners. Extension practitioners act as facilitators in building partnerships with private sector, research, district and local municipalities, producer organisations, markets (inputs and outputs) and credit institutions to address producer problems.

5.3 Clients for Extension and Advisory Services

The priority focus is on smallholder producers and subsistence household food producers. Extension practitioners should provide these clients with support envisaged under the six pillars of the Comprehensive Agricultural Support Programme (viz. Information and Knowledge Management, technical and advisory assistance, regulatory services, training and capacity building, marketing and business development, and facilitating access to appropriate on-and off-farm infrastructure).



Table 1: CATEGORIES OF PRODUCERS

Producer Category	Definition
Household Producer (Vulnerable)	A producer that produces primarily for household and has limited resources and skills to operate a market-oriented production system. This category includes vulnerable women and youth, child headed households, persons with disabilities, farm workers and households that are <u>registered as indigents</u> or would qualify to be registered as indigents.
Household Producer (Subsistence)	A producer that produces primarily for household consumption. These producers are not or would not be classified as indigents by their municipality and they do not meet the criteria to be registered as indigents with their municipalities. They may market limited surplus production with an annual turnover of less than R50 000 .
Smallholder Producer	A venture undertaken by an individual or business entity for the purpose of household consumption and deriving a source of income from agriculture, forestry and fisheries activities along the value chain. These are usually the new entrants with an annual turnover ranging from R50 001 – R1 million per annum .
Medium Scale Commercial Producer	A venture undertaken by an individual or entity for the purpose of deriving a source of income from agriculture, forestry and fisheries activities along the value chain. These are established enterprises with an annual turnover ranging from R1 000 001 – R10 million .
Large Scale Commercial Producer	A venture undertaken by an individual or entity for the purpose of production and sale of agriculture, forestry and fisheries products to make a profit. These are established enterprises producing for market to make a profit with an annual ranging between R10 000 001 – R50 million .
Mega/Corporate Producer	A venture undertaken by an individual or entity for the purpose of production and sale of agriculture, forestry and fisheries products to make a profit. These are established enterprises producing for market to make a profit with an annual turnover above R50 million .

6. POLICY INTERVENTION MEASURES

6.1 Effective and Efficient Linkage Mechanism between Research, Extension and Producers

The flow of information between researchers and producers is not as efficient and effective as it should be. Ensuring effective technological transfer and efficient flow of technological innovations between the researchers, extension and producers can only be achieved through the development of an efficient researcher, producer and extension linkages. The policy and institutional context determine the types of strategies and mechanisms that can be used to develop effective linkages between research, extension and producer. Key contextual factors influencing such linkages include the resource availability and organisational structure of state institutions at national and provincial spheres that are involved in the agriculture, forestry and fisheries.

Improving these linkages requires increased representation and participation of producers and extension practitioners within the three sectors where decisions about research priorities are being made. For production technologies to be relevant to local needs, researchers, extension practitioners and producers must be actively involved in identifying research problems, adapting the recommendations to local conditions and providing feedback to research (from production to

market research). This should also include the active engagement of private and non-profit actors. A strong and integrated linkage (which includes joint planning and review processes; collaborative professional activities; resource allocation procedures; structural linkage mechanisms; and communication devices) between research, extension and the producer is needed if the three institutional sectors are to achieve effectiveness, efficiency and a wide scale sustainable impact.

Core policy actions:

- Design participatory and integrated institutional structures that bring together extension, research and producers at national, provincial and district levels.
- Design user-friendly ICT knowledge sharing platforms, such as social networks, to effect mass communication amongst actors, which also ensures free accessibility to research outcomes.
- Facilitate demand-driven research and extension services by promoting action-based and producer-led research processes by supporting programmes based on participatory on-farm trials, research-station based research processes, to ensure inclusion of producers and extension practitioners in all research processes.
- Organise smallholder producers into commodity groups to ensure that they have a voice in all research processes.
- Develop a multi-linguistic approach in line with the dissemination of information process, to enable open access to information by all actors across the value chain.
- Promote the adoption of locally viable technologies and indigenous knowledge systems by producers.

6.2 Improved Access to Quality Extension and Advisory Services that are Professional, Reliable, Relevant and Accountable

Several development programmes have been developed by DAFF to respond to urgent priority issues such as food security, poverty eradication, food safety, economic growth and environmental conservation. These include: Integrated Sustainable Rural Development Strategy (ISRDS), the Land and Agrarian Reform Programme, the Integrated Food Security Nutrition Programme (IFSNP), the National LandCare Programme, Marketing and Entrepreneurship Development and Comprehensive Agriculture Support Programme (CASP). The successful implementation of these programmes depends largely on improved access to quality extension and advisory services that is professional, reliable, relevant and accountable.

Since 1994 the democratic government of South Africa undertook to prioritise the smallholder and subsistence producers as a way of increasing their participation in agricultural sector in line with principle of equality. This called for transformation of public extension services to meet the various needs of large numbers of producers. Hence the development of the Extension Recovery Plan (ERP) in 2008/9 as an overall strategy to revitalise extension services in the country to effectively address prevailing socio-economic conditions owing to the inequalities of the past. The five pillars of

the programme are: ensuring visibility and accountability of extension, promoting professionalism and improving image, recruitment of extension personnel, re-skilling and reorientation of extension and provision of information communication technology (ICT) and other resources.

However the lack of a National Policy on Extension and Advisory Services rendered ERP being operated within an unregulated fragmented approach. Hence the need to develop a common regulatory framework and a set of principles to achieve shared over-arching objectives and priorities set out in the 2012 IGDP and NDP. Therefore building on the progress achieved through the ERP, DAFF will draft an Extension Development Plan (EDP) which will give effect to the aims, objectives and principles of the National Extension and Advisory Services Policy. This framework recognises the merger of the three sectors and hence seeks to provide guidance and support in the provision of extension and advisory services by DAFF. The EDP will supersede the Extension Recovery Plan (ERP) (which addresses only agricultural extension) and set out an integrated strategy for the enhancement and maintenance of extension and advisory services in agriculture, forestry and fisheries sectors. The EDP will further provide the plan for implementation of this policy by the public and private sectors, and for monitoring and evaluating extension and advisory services in the country.

The major part of access to quality extension and advisory services depends on the extension to farmer ratio which is currently low; particularly for smallholder producers as compared to large scale commercial producers as noted in the Norms and Standards for Extension and Advisory Services in Agriculture (DAFF, 2005). The Norms and Standards for Extension and Advisory Services in Agriculture recommend the following figures as a rough indication and estimates of what the extension/farmer ratios should be, but local conditions, circumstances and realities must dictate the application of ratios (see Table 2 below).

Table 2: Extension practitioner to producer ratios

SCALE OF OPERATION	NATURE OF OPERATION/FARMING		
	Crops	Livestock	Mixed
Subsistence and Smallholder	1:400	1:500	1:500
Semi-commercial	1:250	1:250	1:300
Market oriented and large scale commercial	1:500	1:500	1:500

Source: Norms and Standards for Extension and Advisory Services, 2005

Extension and advisory services should be rendered, at the minimum, with a common understanding of competence as defined in the Public Service Regulation (South Africa, 2001) which states the need for a blend of knowledge, skills, behaviour and attitude that can be applied in the work environment. Among others the Extension Norms and Standards identify the following as the invaluable package of skills for an extension practitioner: client orientation and customer focus, communication, project management, knowledge management, service delivery innovation,

problem solving and analysis, honesty and integrity, people management and empowerment. Furthermore, the professional registration of extension practitioners will ensure the establishment and maintenance of high quality (professional, reliable, relevant and accountable) extension and advisory services.

Core policy actions:

- Recruit competent extension practitioners to augment the current human capital.
- Certify and ensure the competence of extension professionals through registration with a recognised and credible professional body.
- Develop a National Extension Development Plan (EDP).

6.3 Facilitate a Pluralistic and Integrated Approach to provide Extension and Advisory Services

A variety of Extension Service Providers (ranging from public, private and NPOs) are already involved in rural development initiatives. DAFF acknowledges that a major part of reforming extension will include greater coordination and collaboration efforts between the different institutions that provide extension services. This kind of collaboration and coordinated approach must equally apply to research, technology development and innovation processes such that a pluralistic 'complex' of researchers and extension practitioners from public, private and NPOs exist. The provision of extension services to such a wide and diverse clientele of producers in South Africa further justifies the need for a pluralistic approach that embraces all extension service providers within and outside state agencies. Such an approach will allow extension services to benefit from the distributed human intelligence, financial capital and other resources located across the stakeholder-base. Government should therefore assume responsibility for ensuring that extension services deliver needed public goods and are well placed to promote increased institutional pluralism in extension service provision and oversee the quality enhancement and assurance necessary for rural development.

Core policy actions:

- Identify and establish pluralistic and integrated extension and advisory services partnerships with private and non-profit organisations (at national, provincial and local levels).
- Establish provincial directorates for extension and advisory services.
- Establish the National Public Sector Forum for Extension and Advisory Services (PSFEAS).
- Establish extension forums at district and provincial level.
- Design and implement respective provincial strategies for extension and advisory services.

6.4 Advance the Extension Education System and Broaden Service Focus

Extension and advisory services must respond to a wide set of local, national and global production and market pressures across value chains. This justifies the need for appropriate and innovative

technologies that respond to environmental and socio-economic challenges in support of diverse rural livelihood initiatives. Extension is part of a wide range of services needed to help producers acquire relevant knowledge and skills to increase and sustain the productivity and competitiveness of their enterprises. Currently extension and advisory services lack a developmental and systems approach, where practitioners have a holistic view and understand the total value chain and linkages with sustainable development goals. This presents a new challenge for the education and training curriculum of extension practitioners which is currently inadequate to address the new competencies required for comprehensive producer development. This calls for a multidisciplinary approach for the capacity development of extension practitioners with the relevant and diverse knowledge and tools.

Core policy actions:

- Support producers on diverse rural livelihood initiatives based on a wider understanding of the overall development context and socio-economic objectives.
- Review and develop multidisciplinary training curriculum for extension practitioners.
- Ensure continuous professional development through systematic maintenance, improvement and broadening of knowledge and skills, and development of personal qualities necessary for the execution of professional and technical duties of extension practitioners.

6.5 Promote Commodity Value Chain Development Approach

The challenge facing smallholder producers is how to gain greater access to markets, enhance their value chain position and to increase their value-add (improve quality, increase efficiency) for competitiveness, improved income and reducing poverty. Value chains encompass the full range of activities and services required to bring a product or service from production to markets. As noted by Punkt (2005), value chains describe productive processes around a product from the provision of inputs to production, transportation, transformation, processing, marketing, trading, and retailing to final consumption. Value chain actors include input suppliers, producers, processors and buyers which are supported by a range of technical, business and financial service providers. Since production only translates into income once consumers demand and buy goods, the value chain approach encourages looking at the production process from the consumer's perspective.

Value chains and diversified livelihoods are no longer simply dependent upon what one produces, but also how production fit within competitive chains in the market system. Extension services provide information, skills, and technologies to improve producer livelihoods and can strengthen linkages within the commodity value chain. The focus of extension has been the transfer of technology to improve productivity. While transfer of technology is very relevant to the developing world, extension must also play a wider role to enhance the skills and knowledge for production and processing, facilitating access to markets and trade, and working with farmers for natural resource management. Although extension services are traditionally focused on production aspects, this

policy asserts a serious shift towards a value chain approach. As such, extension practitioners have a great role to play in promoting the value chain approach to agricultural development. This equally calls for developing the capacity of the extension practitioners in order to extend effective and efficient support to producers.

Core policy actions:

- Integrate marketing and value chain aspects into extension and advisory services activities. Extension practitioners must become champions of the value chain approach to integrate comprehensive value chain aspects into farming operations.
- Support market access opportunities for producers (especially smallholders) by negotiating for marketing outlets including preferential procurement opportunities by state agencies and others.

7. POLICY IMPLEMENTATION PLAN AND INSTITUTIONAL ARRANGEMENTS

This policy builds on the Extension Recovery Plan, Norms and Standards for Extension and Advisory Services, National Policy on Food and Nutrition Security and Comprehensive Agricultural Support Programme. This policy seeks to strengthen and expand the original focus of all these national policy framework documents and programmes to include forestry and fisheries as the added roles and responsibilities of DAFF as a department. While the ERP and the Norms and Standards for Extension and Advisory Services strategies will continue to guide and provide the detailed policy interventions, the National Policy on Extension and Advisory Services will assume the superseding position of the state's interventions on extension and advisory services.

The implementation of this policy builds on current and existing government implementation agencies. Here it is recognised that agricultural extension is a national and provincial competency while forestry and fisheries remain national government responsibilities. This policy also recognised that extension is multi-pronged and pluralistic such that the role players include the private sector and non-profit organisations over and above the state. The principal actors for the achievement of the policy strategic objectives are national, provincial, local governments, producer organisations, other statutory bodies such as public entities, SETAs, and the private sector.

While the policy integrates agriculture, forestry and fisheries, their nature in terms of national and provincial competencies dictates their independence and interdependencies and thus the need to extend efforts for integration recognising that these functions do exist at national, provincial and district spheres of government. The successful implementation of this policy could therefore benefit the integration of the agriculture, forestry and fisheries functions at all spheres of government.

DAFF and PDAs will establish local district extension forums in consultation with relevant stakeholders (private, social, public actors and researchers), to bring together all extension and advisory service providers in a coherent geographic grouping, together with representatives of

agriculture, forestry and fisheries producers (such as producer associations). Similar forums will be established at provincial and national levels. The forums will (i) articulate priorities, (ii) outline the co-ordination of planning and action with regard to the provision of extension and advisory services in the designated geographic area, and (iii) help local interest groups secure advice and support from higher levels. The creation of these forums and their consultative agendas will not necessarily be uniform, but will be created based on experience and learning from the ground.

The policy implementation process will be phased with short, medium and long term implementation plans. Short term plans will focus on immediate interventions required to support the three sectors through extension and advisory services while the medium and long term implementation will focus on interventions to transform the current structure of the extension system to address shortcomings identified through the policy analysis and development process.

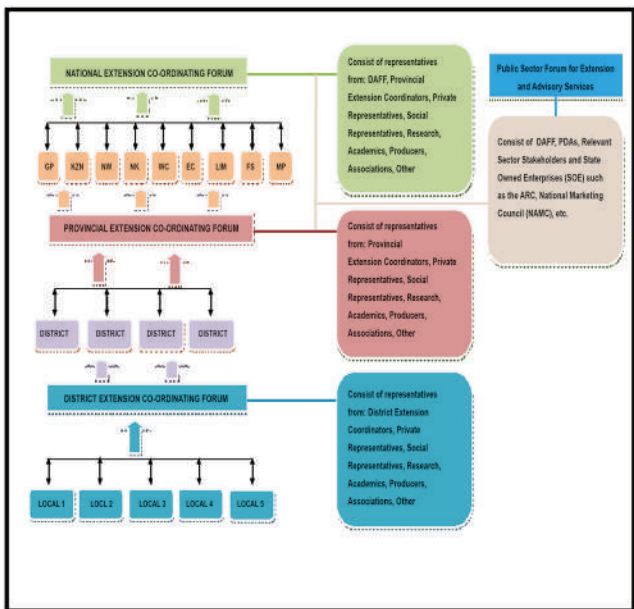


Figure 1: Institutionalisation of extension coordinating forums

The roles and responsibilities of different role players are outlined below:

7.1 Public Sector

The key roles and responsibilities of the national government (DAFF), provincial departments of agriculture (PDAs), districts, Agricultural Research Council (ARC) and private sector extension service providers are highlighted below. Coordination and collaboration between the principal stakeholders is essential to provide high quality service.

7.1.1 Department of Agriculture, Forestry and Fisheries (DAFF)

The main responsibilities of DAFF are to:

- Develop National Extension and Advisory Services Policy framework documents for the country in order to regulate, guide and harmonise extension and advisory services;
- Provide oversight on the implementation of National Extension and Advisory Services Policy through monitoring and evaluation to ensure compliance to policy prescripts;
- Review National Extension and Advisory Services Policy on an ongoing basis and in line with new developments;
- Create an enabling environment for equitable participation in advisory services (facilitate access to facilities and schemes, facilitate availability of referenced material and other sources, and coordinate the policy dialogue in all nine provinces);
- Maintain a national database for extension service providers;
- Develop and maintain a national technical database covering mapping, climate, soil potential cropping, water (source and quality) diseases pests, agro-ecological system, market, infrastructure, etc.
- Collaborate and partner with key principal stakeholders in extension and advisory services;
- Consult stakeholders for comments, inputs and implications of the policy;
- Ensure and support PDAs in the establishment of forums for successful implementation of the policy;
- In conjunction with relevant institutions of higher learning, facilitate the development, review and the promotion of a standard extension training curricula;
- Ensure cooperative governance at national, provincial and local municipal levels (for the purposes of this policy);
- Provide secretariat services at meetings of national forums on extension and advisory services;
- Produce and distribute national reports/newsletters on extension and advisory services at regular intervals;
- Support PDAs with the implementation of the policy;
- Ensure provision of extension and advisory services to all clients of extension and advisory services; and
- Maintain agricultural, forestry and fisheries infrastructure and facilities.

7.1.2 Provincial Services

The main responsibilities of the PDAs are to:

- Actively participate and provide inputs on the development of the National Extension and Advisory Services Policy;
- Interpret and implement the National Extension and Advisory Services Policy;
- Build capacity of personnel (extension practitioners, advisors, mentors, etc.);
- Facilitate establishment of extension forums at provincial and district levels;
- Provide secretariat services on meetings of provincial forums on extension and advisory services;
- Facilitate establishment of a provincial directorate of extension and advisory services;
- Develop provincial strategies for implementing extension and advisory services policy;
- Establish, strengthen and empower producer organisations and commodity groups through appropriate support mechanisms;
- Develop and maintain a provincial technical database covering mapping, climate, soil potential cropping, water (source and quality) diseases pests, agro-ecological system, market, infrastructure, etc.
- Develop and maintain clientele and stakeholder database for extension;
- Participate in the development of provincial Integrated Growth Development Plans;
- Consolidate extension performance reports from districts and submit to DAFF on a regular basis;
- Provide feedback to clients and other relevant stakeholders;
- Budget for and administer the disbursement of public funds;
- Facilitate the establishment of funding schemes to assist producers and processors;
- Create an enabling environment for increased participation in commodity value chains (formal and informal);
- Assist districts to address shortfalls and on areas of poor performance;
- Provide oversight on the implementation of the policy and, monitor and evaluate implementation process at district level.

7.1.3 District Services

The key roles to be executed at the district levels are to:

- Participate in the development of Municipal Integrated Development Plans;
- Manage and coordinate the provision of extension and advisory services within the district;
- Facilitate establishment of extension forums at district level;
- Provide secretariat services on meetings of district forums on extension and advisory services;
- Participate in budgetary processes at provincial level;
- Input on and maintain a provincial database of all clients eligible for extension and advisory services including all service providers and their expertise on agricultural extension and advisory services within the district;

- Develop and maintain a district technical database covering mapping, mapping, climate, soil potential cropping, water (source and quality) diseases pests, agro-ecological system market, infrastructure, etc.
- Liaise with the local municipalities and stakeholders to enhance inter-sectoral development efforts at district level;
- Carry out needs assessment of clients to determine required support services;
- Develop, consolidate and submit extension reports to the province; and
- Within their designated arena of service, provincial personnel in extension and advisory services will provide advice and facilitate access to knowledge, information and services to promote livelihood development, focusing primarily on lower income areas and smallholder producers who produce for own consumption, for the market or both.

7.1.4 Agricultural Research Council (ARC) and Public Sector Research Institutions

Research is crucial to improve productivity and ensure the sustainability of agricultural, forestry and fisheries sectors. However, ensuring that technological innovations flow from the researchers to producers (and vice versa) is the prime responsibility of extension and advisory services. Therefore, the link between researchers-extension-producers must be strengthened. The ARC and public sector research institutions must actively engage with producers and extension practitioners and advisors in transferring the technological know-how. Specifically, the ARC and other public sector research institutions must ensure that:

- Partner with DAFF in a collaborative manner to develop the National Extension and Advisory Services Policy;
- Actively participate in collaborative extension efforts with multiple stakeholders at district, provincial and national level;
- In conjunction with DAFF, conduct regular reviews of the implementation process of the National Extension and Advisory Services Policy (collect data, analyse and make recommendations) on behalf of DAFF;
- Conduct research and technology development programmes planned in collaboration with extension practitioners and producers;
- Provide backup on technical expertise and ensure accessibility to producers and extension practitioners;
- Generate technology and innovation packages that are of relevance to all categories of clients and diverse agro-ecological zones;
- Generate knowledge that is widely accessible in electronic or other appropriate formats countrywide, and in the appropriate languages;
- Support empowerment initiatives through appropriate technology development and transfer; (Agricultural Black Economic Empowerment and Forestry Sector Charter);
- Design and implement a Training-of-trainers Programme on new technologies on an ongoing basis;

- Develop a discussion document on 'Bridging the gap between research and development (R&D) and extension' informed by key relevant stakeholders; and
- ARC must inform PDAs of planned activities annually.

7.2 Private Sector

Government recognises the essential role played by private sector organisations in the provision of extension and advisory services to achieve the vision of a united and prosperous agricultural, forestry and fisheries sector. Partnerships between public and private sector extension and advisory services are essential to overcome the effects of limited resources, to meet the growing demand for food and sustain the natural resource base. The private sector shall play the following roles:

- Contribute to AgriBEE and Forestry Sector Charter initiatives by developing and implementing empowerment strategies. Such empowerment strategies will include amongst others the following:
 - Human resource and skills development of people from the designated groups; and;
 - Investment in enterprises that are owned and managed by people from the designated groups;
- Provide production inputs, finance, mentorship, extension and advisory services to their empowerment clients;
- Provide advice and effective specialised financial support (especially to land reform beneficiaries);
- Play a key role on extension forums through empowerment of other stakeholders;
- Participate and provide inputs towards the development of the National Extension and Advisory Services Policy;
- Effectively participate in joint planning and implementation of advisory service programmes;
- Provide a range of more specialised technical advisory services as required by their clients focusing, on specific crops, livestock, processing methods or equipment;
- Continue to be the primary provider of extension support to commercial producers but will be actively encouraged to participate in the initiatives aimed at empowering rural and local communities to improve their productivity through the enhancement of relevant management, marketing, and technical skills; and
- To establish public-private partnerships for research, training and investment opportunities.

7.3 Producer Organisations and Commodity Groups

Producer organisations and commodity groups exist at national and provincial levels to support development initiatives. The role of this group is to:

- Offer training on extension and advisory services to their members;
- Represent members' interests in expressing demand for services;
- Actively participate on the development of National Extension and Advisory Services Policy;

- Play a leading role in the integration of the value chain commodity-based extension approach;
- Play a key role on extension forums through empowerment of other stakeholders;
- Enable joint planning, implementation, monitoring and evaluation of advisory support at national, provincial and district levels;
- Participate and contribute to problem resolution mechanisms with other stakeholders;
- Lobby and advocate for systematic ways of listening to and learning from producers within value chains;
- Mobilise around issues of interest as producer organisations and take the lead in researching, developing, institutional management and land holding arrangements that meet social, economic and environmental sustainability standards; and
- Participate in public-private partnerships with DAFF to ensure effective service delivery.

7.4 Non-Profit Organisations (NPOs)

- As with the private sector, NPOs may also be engaged by the state directly, through public-private partnerships, through a smallholder voucher system or through other means to provide extension and advisory services and other activities on behalf of the state;
- NPOs will continue to play their unique and vital advisory, advocacy and facilitation roles with individuals, communities and organisations that are marginalised and require assistance to improve their individual and collective circumstances.

7.5 Academic and Agricultural Development Institutions

7.5.1 Colleges and universities

Academic institutions with extension and advisory services training components are vital for building and sustaining capacity in the public services. These institutions need to review their curricula to develop well-trained extension practitioners that are able to respond effectively to the challenges facing extension and advisory services (*viz.* food security, economic growth, globalisation and environmental conservation).

They also need to contribute to the knowledge support system of government (e.g. information gateway) and offer accredited in-service training to extension practitioners and advisory personnel and train producers through their community-outreach programmes. Academic institutions should conduct research for technology development and transfer.

Cooperation with the AgriSETA should be established to coordinate training for emerging farmers.

7.5.2 Development institutes

Development institutes play an important role in conducting research on technology development and transfer, and the provision of specialised support to commercial and smallholder producers (e.g. Grootefontein Agricultural Development Institute). These institutes should be supported and strengthened to become centres of excellence in their areas of expertise.

8. MONITORING AND EVALUATION FRAMEWORK

Performance monitoring and evaluating enables improved management of the outputs and outcomes while encouraging the allocation of effort and resources in the direction where it will have the greatest impact. Successful measurement depends on the quality of data collected through programme records, surveys, and secondary sources. Data should be collected in a consistent manner using agreed definitions and procedures, and stored in appropriate computer databases to facilitate data access, analysis and reporting.



Table 3: Indicators for monitoring and evaluation of the National Policy on Extension and Advisory Services

Policy interventions	Measurement Indicator	Means of verification
Promote effective and efficient linkage between research, producers and extension	<ul style="list-style-type: none"> Number of strategic partnerships created through IGR and stakeholder frameworks Number of producers, researchers and extension practitioner represented in research, extension and producer forums Number of commodity groups linked to research organisations Number of extension practitioners attached to commodity groups Integrated ICT knowledge sharing platforms established Number of active users of integrated ICT knowledge sharing platforms Number of multilingual documents and research abstracts developed Number of extension practitioners per district in a province Number of producers with access to extension support per district as well as province Framework document for registration extension practitioners with a professional council developed Number of extension practitioners registered with a professional body Number of extension practitioners trained on Climate-Smart agricultural production systems Increased productivity for producers National Extension Development Plan developed Number of provincial directorates for extension and advisory services established Provincial strategies for extension and advisory services approved Number of pluralistic extension support forums (national, province, district) established Frequency of meeting for pluralistic extension forums at national, provincial, district levels Core competencies and curricula of extension reviewed Number of producers and/or communities supported on other rural livelihood based initiatives Change in income from other rural based initiatives Framework document for registration extension practitioners with a professional council developed Higher education curriculum on extension revised Number of extension practitioners trained for continuous professional development Number of extension practitioners and actors trained in the value chain approach Number of commodity value chains established Number of participants in commodity value chains Number of producers and processors accessing sustainable markets 	<ul style="list-style-type: none"> Signed MOUs and SLAs Agreed TORs, attendance registers/ minutes of the meeting Reports from research, extension and producer forums. Reports Reports and established tools Reports Documents, abstracts, production manuals Reports/national database of extension practitioners Reports Framework document approved by DAFF and a professional council Reports, database of extension practitioners Reports, attendance register and/or attendance certificates Reports Framework document Revised organogram, minutes and reports Provincial strategies, minutes and reports Agreed TORs, reports Agreed TORs, attendance registers/ minutes of the meeting Reports and MOUs Reports Reports Framework document Reports, minutes, revised curriculum Reports Reports Reports Reports Market reports
Improve access to quality extension and advisory services that is professional, reliable, relevant and accountable		
Facilitate a pluralistic and integrated approach to provide extension and advisory services		
Improve extension education system and broaden service focus		
Promote commodity value chain development approach		

9. FUNDING MECHANISMS

Government of South Africa will continue to fund extension and advisory services. This is especially so to poorly resourced clients. A user-pay principle will apply in the case of producers and members of producer organisations that can afford to pay for services rendered. Outsourcing, co-financing, contracting of services and private funding should be implemented to solve the problem of fiscal sustainability. Full-scale privatisation of extension and advisory services is not feasible in the country at the moment and government policy is to ensure equity and meet the need to support the many clients who rely on the public service, and who have no means to pay for private services. However, integration of the private sector into the public extension and advisory services is encouraged and promoted.





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1. INTRODUCTION

Since 1994 numerous regulations, policies, and strategies have been developed and implemented at national, provincial and municipal government levels. The strategic intent is to redress the disparities inherited from the apartheid era and to foster equitable access to all South Africans, with a particular emphasis on previously marginalised black smallholder producers. This implementation plan of the National Policy on Extension and Advisory Services is developed with the intent of addressing a number of problems and challenges with regard to the coordination of extension and advisory services in order to enhance and maintain accelerated rural and agrarian development. While focusing on addressing the identified problems and limiting factors to extension and advisory services, this implementation plan also responds to the needs and actual role of extension to facilitate knowledge transfer and skills development for productive, competitive and sustainable (socially acceptable, economically viable and ecologically sound) agriculture, forestry and fisheries.

This implementation plan of the National Policy on Extension and Advisory Services builds on the Norms and Standards for Extension and Advisory Services and the Extension Recovery Plan (ERP), National Policy on Food and Nutrition Security (2013) and Comprehensive Agricultural Support Programme (CASP). The plan also recognises the need to strengthen coordination and linkages with forestry and fisheries, as the added roles and responsibilities of DAFF as a department. The ERP and the Norms and Standards for Extension and Advisory Services will continue to guide and be utilised as tools for advisory services while the policy will assume the superseding position of the state's interventions on extension and advisory services.

The implementation of this policy builds on the existing government implementation agencies. Here it is recognised that agricultural extension is a national and provincial competency while forestry and fisheries remain national government responsibilities. This policy also recognises that extension is multipronged and pluralistic; such that the role players include the private sector, non-profit organisations, institutions of higher learning, research institutions and producers over and above the state. The principal actors for the achievement of this implementation plan on policy strategic objectives are national, provincial, local governments, farmer organisations, other statutory bodies such as public entities, Sector Education and Training Authorities (AgriSETAs), institutions of higher learning and the private sector.

While the policy integrates the agriculture, forestry and fisheries sectors, their nature in terms of national and provincial competencies dictates their independence and interdependencies; hence the need to extend efforts for integration. The successful implementation of this policy could therefore benefit the integration of the agriculture, forestry and fisheries functions at all spheres of government.

2. PURPOSE AND SCOPE OF THE IMPLEMENTATION PLAN

National Extension and Advisory Services refer to the active collaborative engagement of all stakeholders, actors and role-players involved in the agricultural, forestry and fishery value chains to support wise decision-making about the socially, economically and environmental sustainable use of resources in the pursuit and advancement of their livelihoods to ensure the optimal contribution of each sector to the economy and the welfare of society.

Active collaborative engagement includes, among other things, facilitating access to knowledge, information and technologies, fostering learning and practical partnerships, and assisting all parties to develop their technical, organisational and management skills and practices. Participants include primary producers, extension practitioners, researchers, agri-businesses, processors and education and other relevant institutions.

2.1 Purpose of the Implementation Plan

The implementation plan of the National Policy on Extension and Advisory Services is underpinned by the three-fold aim:

- (i) fostering wise decision-making about using resources in the context of broadening ownership of assets and strengthening enterprises to realise a food trade surplus and ensure household food and nutrition security; eradicate poverty and inequality; raise employment and investment, and to improve livelihoods;
- (ii) building capacity for self-reliance; and
- (iii) ensuring that the agriculture, forestry and fisheries sectors make meaningful contributions to the broader economy and the advancement of society, and ensure environmental sustainability and resilience to future shocks.

2.2 Scope of the Implementation Plan of the Policy

This implementation plan applies to extension and advisory services for agriculture, forestry and fisheries sectors in all rural and urban areas of South Africa, as well as to marine fishery operators wherever they work. It covers all scales of production and processing by all South Africans, regardless of their socio-economic background or status, their level of income, their degree of livelihood dependence on these sectors, or the degree of their engagement with the market. It applies to all modes of extension and advisory service delivery by among others: government, the private sector, NPOs, producer organisations and producers. This plan is aligned with the National Growth Path (NGP) and National Development Plan (NDP).

2.3 Extension Methods

Effective implementation of the policy requires mutual understanding and commitment by the full complement of extension and advisory service providers (including producers and processors, the

state, the private sector or non-profit organisations). This approach will make a vital contribution in enhancing productivity, ensure food security, eradicate poverty and vulnerability.

There is no single extension model or approach suited to all situations in South Africa. Approaches and methods must be adapted to local situations and conform to the aforementioned principles (for different methods and extension approaches please refer to the Norms and Standards for Extension and Advisory Services, June 2005). The choice and combination(s) of extension methods for implementation of the policy must be dictated by the prevailing conditions.

With a multiplicity of service providers, coordination is essential to ensure quality and adherence to minimum norms and standards. Provincial departments of agriculture should establish directorates for extension and advisory services in order to focus and coordinate these state services in an effective, harmonised and recognised manner. These directorates will be responsible for the design and implementation of their respective provincial extension and advisory services strategies for the advancement of the provincial agriculture, forestry and fisheries sector. This will ensure that provision of appropriate professional, financial and administrative support to personnel and the overall extension and advisory function.

2.4 Policy Implications on Women

The implementation of this policy will meet the commitment made by government to accelerate the empowerment of women in South Africa and address the challenges they face in terms of the triple burden of unemployment, poverty and inequality. Underpinning the need to mainstream gender and women's issues into the implementation of this national policy is that of working towards women's economic empowerment. Women need to be involved in the value-chain of land which includes agriculture, forestry, food security, property, access to credit, markets and production.

Furthermore, in order to promote women's economic empowerment, training and skills development are two critically essential variables. Education, training and skills development provide improved access to credit, newer technologies, and market participation. Economically empowering women provides them with the capacity to bring about their own economic change and social empowerment and promote a balance of power between women and men. It ultimately leads to women's self-resilience, self-reliance and autonomy.

3. IMPLEMENTATION PLAN AND INSTITUTIONAL ARRANGEMENTS

The National Extension and Advisory Services Policy presents an excellent opportunity for a holistic, well facilitated and collaborative approach to improve, implement and monitor extension and advisory services strategies and norms and standards, while creating a coordinated platform and space for different actors to play specific roles in the development of a prosperous and sustainable agriculture sector. The strength of an effective extension and advisory service lies in the ability of all role-players, stakeholders and service providers in the sector to work together

and share knowledge and information. This will ensure that the combined capacity and knowledge base within the public, private and non-profit actors can be synergised and channelled towards the advancement of the agriculture, forestry and fisheries sectors. Therefore, this implementation plan enables the facilitation of extension and advisory services that are pluralistic; recognising that there are roles for the state, the private sector, non-profit organisations and for producers themselves in delivering services. Decentralisation and pluralism are preconditions for extension to take on a facilitation approach and to become directly accountable to clients at field level.

DAFF will provide support to the PDAs to establish provincial and district extension forums thus ensuring provincially integrated service delivery. This approach will bring together all extension and advisory service providers in a coherent geographic grouping; together with representatives of agriculture, forestry and fisheries producers. The forums will (i) articulate priorities, (ii) outline the co-ordination of planning and action with regard to the provision of extension and advisory services in the designated geographic area, and (iii) help local interest groups secure advice and support from higher levels.

The establishment of these forums and their consultative agendas will not necessarily be uniform, but will be created based on experience and learning from the ground. PDAs should coordinate (through extension forums) the various types of service providers aligning them with the community institutions. Existing structures, such as producer organisations and/or commodity groups should be consulted and partner with government structures (local and district municipalities) to act as overarching forums that take responsibility for development initiatives and commissioning of projects. Flexibility and adaptation to meet situation specific circumstances is important. This is coordinated with the understanding that not all community and/or producer challenges can be resolved by extension practitioners. Extension practitioners act as facilitators in building partnerships with private sector, research, district and local municipalities, producer organisations, markets (inputs and outputs) and credit institutions to address producer problems.

The implementation process of the policy will be phased in with short term, medium and long term implementation plans. Short term plans will focus on immediate interventions required to support the three sectors through extension and advisory services while the medium and long term implementation will focus on interventions to transform the current structure of the extension system to address shortcomings identified through the policy analysis and development process.

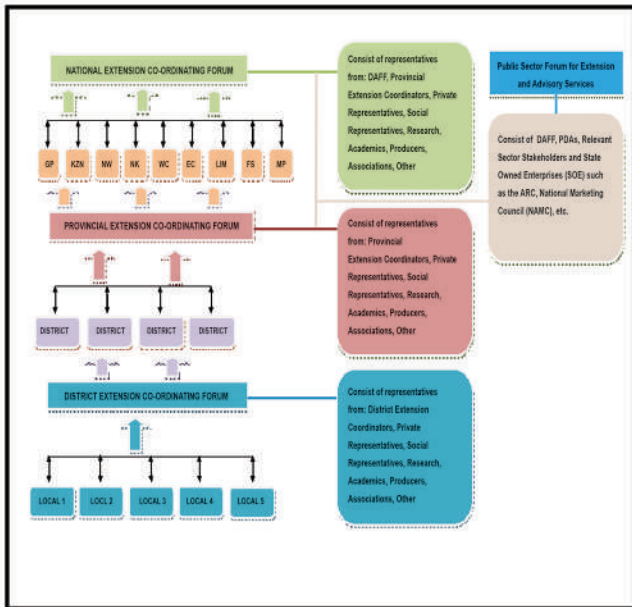


Figure 1. Institutionalisation of extension coordination forums

The roles and responsibilities of different role players are outlined below:

3.1 Public Sector

The key roles and responsibilities of national government (DAFF), PDAs, districts, Agricultural Research Council (ARC) and private sector extension service providers are highlighted below. Coordination and collaboration between the principal stakeholders is essential to provide high quality service.

3.1.1 Department of Agriculture, Forestry and Fisheries (DAFF)

The main responsibilities of DAFF are to:

- Develop a National Extension and Advisory Services Policy framework for the country in order to regulate, guide and harmonise extension and advisory services;

- Provide oversight on the implementation of National Extension and Advisory Services Policy through monitoring and evaluation to ensure compliance to policy prescripts;
- Review National Extension and Advisory Services Policy on an ongoing basis and in line with new developments;
- Create an enabling environment for equitable participation in advisory services (facilitate access to facilities and schemes, facilitate availability of referenced material and other sources, and coordinate the policy dialogue in all nine provinces);
- Maintain a national database for extension service providers;
- Collaborate and partner with key principal stakeholders in extension and advisory services;
- Consult stakeholders for comments, inputs and implications of the policy;
- Develop and maintain a national technical database covering mapping, climate, soil potential cropping, water (source and quality) diseases pests, agro-ecological system, market, infrastructure, etc.
- Ensure and support PDAs in the establishment of forums for successful implementation of the policy;
- In conjunction with relevant institutions of higher learning, facilitate the development, review and the promotion of a standard extension training curricula;
- Ensure cooperative governance at national, provincial and local municipal levels (for the purposes of this policy);
- Provide secretariat services on meetings of national forums on extension and advisory services;
- Produce and distribute national reports/newsletters on extension and advisory services at regular intervals;
- Support PDAs with the implementation of the policy; and
- Ensure provision of extension and advisory services to all clients of extension and advisory services.
- Maintain agricultural, forestry and fisheries infrastructure and facilities.

3.1.2 Provincial services

The main responsibilities of the PDAs are to:

- Actively participate and provide inputs on the development of the National Extension and Advisory Services Policy;
- Interpret and implement the National Extension and Advisory Services Policy;
- Build capacity of personnel (extension practitioners, advisors, mentors, etc.);
- Facilitate establishment of extension forums at provincial and district levels;
- Provide secretariat services on meetings of provincial forums on extension and advisory services;
- Facilitate establishment of a Provincial Directorate of Extension and Advisory Services;
- Develop provincial strategies for implementing National Extension and Advisory Services Policy;
- Establish, strengthen and empower producer organisations and commodity groups through appropriate support mechanisms;

- Develop and maintain a provincial technical database covering mapping, climate, soil potential cropping, water (source and quality) diseases pests, agro-ecological system, market, infra develop and maintain a national technical database covering mapping, climate, soil potential cropping, water (source and quality) diseases pests, agro-ecological system, market, infrastructure, etc.
- Develop and maintain clientele and stakeholder database for extension;
- Participate in the development of Provincial Integrated Growth Development Plans;
- Consolidate extension performance reports from districts and submit to DAFF on a regular basis;
- Provide feedback to clients and other relevant stakeholders;
- Budget for and administer the disbursement of public funds;
- Facilitate the establishment of funding schemes to assist producers and processors;
- Create an enabling environment for increased participation in commodity value chains (formal and informal);
- Assist districts to address shortfalls and on areas of poor performance; and
- Provide oversight on the implementation of the policy and, monitor and evaluate implementation process at district level.

3.1.3 District services

The key roles to be executed at the district levels are to:

- Participate in the development of Municipal Integrated Development Plans;
- Manage and coordinate the provision of extension and advisory services within the district;
- Facilitate establishment of extension forums at district level;
- Provide secretariat services on meetings of district forums on extension and advisory services;
- Participate in budgetary processes at provincial level;
- Input on and maintain a provincial profile database of all clients eligible for extension and advisory services including all service providers and their expertise on agricultural extension and advisory services within the district;
- Develop and maintain a district technical database covering mapping, mapping, climate, soil potential cropping, water (source and quality) diseases pests, agro-ecological system market, infrastructure, etc.
- Liaise with the local municipalities and stakeholders to enhance inter-sectoral development efforts at district level;
- Carry out needs assessment of clients to determine required support services,
- Develop, consolidate and submit extension reports to the province;
- Within their designated arena of service, provincial personnel in extension and advisory services will provide advice and facilitate access to knowledge, information and services to promote livelihood development, focusing primarily on lower income areas and smallholder producers who produce for own consumption, for the market or both.

3.1.4 Agricultural Research Council (ARC) and public sector research institutions

Research is crucial to improving productivity and ensuring the sustainability of agricultural, forestry and fisheries sectors. However, ensuring that technological innovations flow from the researchers to producers (and vice versa) is the prime responsibility of extension and advisory services. Therefore, the link between researchers-extension-producers must be strengthened. The ARC and public sector research institutions must actively engage with producers and extension practitioners and advisors in transferring the technological know-how. Specifically, the ARC and other public sector research institutions must ensure that they:

- Partner with DAFF in a collaborative manner to develop the National Extension and Advisory Services Policy;
- Actively participate in collaborative extension efforts with multiple stakeholders at district, provincial and national level;
- In conjunction with DAFF, conduct regular reviews of the implementation process of the National Extension and Advisory Services Policy (collect data, analyse and make recommendations) on behalf of DAFF;
- Conduct research and technology development programmes planned in collaboration with extension practitioners and producers;
- Provide backup on technical expertise and ensure accessibility to producers and extension practitioners;
- Generate technology and innovation packages that are of relevance to all categories of clients and diverse agro-ecological zones;
- Generate knowledge that is widely accessible in electronic or other appropriate formats countrywide, and in the appropriate languages;
- Support empowerment initiatives through appropriate technology development and transfer; (Agricultural Black Economic Empowerment and Forestry Sector Charter).
- Design and implement a training-of-trainers programme on new technologies on an ongoing basis;
- Develop a discussion document on *'Bridging the gap between research and development (R&D) and Extension'* informed by key relevant stakeholders; and
- ARC must inform PDA's of planned activities annually.

3.2 Private Sector

Government recognises the essential role played by private sector organisations in the provision of extension and advisory services to achieve the vision of a united and prosperous agricultural, forestry and fisheries sector. Partnerships between public and private sector extension and advisory services are essential to overcome the effects of limited resources, to meet the growing demand for food and sustain the natural resource base. The private sector shall play the following roles:

- Contribute to AgriBEE and Forestry Sector Charter initiatives by developing and implementing empowerment strategies. Such empowerment strategies will include among others the following:

- Human resource and skills development of people from the designated groups, and;
- Investment in enterprises that are owned and managed by people from the designated groups.
- Provide production inputs, finance, mentorship, extension and advisory services to their empowerment clients;
- Provide advice and effective specialised financial support (especially to land reform beneficiaries);
- Play a key role on extension forums through empowerment of other stakeholders;
- Participate and provide inputs towards the development of the National Extension and Advisory Services Policy;
- Effectively participate in joint planning and implementation of advisory service programmes;
- Provide a range of more specialised technical advisory services as required by their clients focusing, on specific crops, livestock, processing methods or equipment;
- Continue to be the primary provider of extension support to commercial producers but will be actively encouraged to participate in the initiatives aimed at empowering rural and local communities to improve their productivity through the enhancement of relevant management, marketing, and technical skills; and
- To establish public-private partnerships for research, training and investment opportunities.

3.3 Producer Organisations and Commodity Groups

Producer organisations and commodity groups exist at national and provincial levels to support development initiatives. The role of this group is to:

- Offer training on extension and advisory services to their members;
- Represent members' interests in expressing demand for services;
- Actively participate in the development of National Extension and Advisory Services Policy;
- Play a leading role in the integration of the value chain commodity-based extension approach.
- Play a key role on extension forums through empowerment of other stakeholders.
- Enable joint planning, implementation, monitoring and evaluation of advisory support at national, provincial and district levels;
- Participate and contribute to problem resolution mechanisms with other stakeholders;
- Lobby and advocate for systematic ways of listening to and learning from producers within value chains;
- Mobilise around issues of interest as producer organisations and take the lead in researching, developing, institutional management and land holding arrangements that meet social, economic and environmental sustainability standards;
- Participate in public-private partnerships with DAFF to ensure effective service delivery.

3.4 Non-Profit Organisations (NPOs)

- As with the private sector, NPOs will also be engaged by the state directly, through public-private partnerships, smallholder voucher system or through other means to provide extension and advisory services and other activities on behalf of the state;

- NPOs will continue to play their unique and vital advisory, advocacy and facilitation roles with individuals, communities and organisations that are marginalised and require assistance to improve their individual and collective circumstances.

3.5 Academic and Agricultural Development Institutions

3.5.1 Colleges and universities

Academic institutions with extension and advisory services training components are vital for building and sustaining capacity in the public services. These institutions need to review their curricula to develop well-trained extension practitioners that are able to respond effectively to the challenges facing extension and advisory services (viz. food security, economic growth, globalization and environmental conservation).

They also need to contribute to the knowledge support system of government (e.g. information gateway) and offer accredited in-service training to extension practitioners and advisory personnel and train producers through their community-outreach programmes. Academic institutions should conduct research for technology development and transfer that is tailor-made for location condition. Cooperation with the AgriSETA should be established to coordinate training for emerging farmers.

3.5.2 Development institutes

Development institutes play an important role in conducting research on technology development and transfer, and the provision of specialised support to commercial and smallholder producers (e.g. Grootfontein Agricultural Development Institute). These institutes should be supported and strengthened to become centres of excellence in their areas of expertise.

4. MONITORING AND EVALUATION FRAMEWORK

Performance monitoring and evaluation enables improved management of the outputs and outcomes while encouraging the allocation of effort and resources in the direction where they will have the greatest impact. Successful measurement depends on the quality of data collected through programme records, surveys, and secondary sources. Data should be collected in a consistent manner using agreed definitions and procedures, and stored in appropriate computer databases to facilitate data access, analysis and reporting. DAFF will, in consultation with the full complement of the stakeholders, develop a monitoring and evaluation system, mechanism and instrument for the collective extension and advisory services. This will require the collection of baseline data as the base for evaluating programme performance, impact and the transformation of extension and advisory services across the three sectors.

TABLE 1: IMPLEMENTATION FRAMEWORK

POLICY INTERVENTIONS	OUTPUT	KEY MILESTONES	RESPONSIBILITY (LEAD DEPARTMENT)
<p>Promote effective and efficient linkage between research, extension and producers</p>	<p>Linkages between the researchers, extension and producers is promoted</p>	<p>Create strategic partnerships through Inter-Governmental Relations (IGR) and Stakeholder frameworks</p> <p>Coordinate strategic linkages between commodity groups and research organisations.</p> <p>Facilitate representation of producers, researchers and extension practitioners to ensure in all established forums</p> <p>Facilitate the attachment of extension practitioners to commodity groups</p> <p>Facilitate the establishment of integrated Information and Communication Technology (ICT knowledge sharing platforms)</p> <p>Develop a multilingual approach in line with the information dissemination process</p>	<p>DAFF and PDAs</p> <p>DAFF, ARC and PDAs</p> <p>DAFF, ARC and PDAs</p> <p>DAFF and PDAs</p> <p>DAFF, ARC and PDAs</p> <p>DAFF, ARC and PDAs</p>
<p>Improve access to quality extension and advisory services that is professional, reliable, relevant and accountable</p>	<p>Access to quality extension and advisory services that is professional, reliable, relevant and accountable</p>	<p>Develop and maintain a national database of extension practitioners per district as well as province (considering number of women participating in extension)</p> <p>Develop a framework document for registration of extension practitioners with a professional council</p> <p>Develop a national database for extension practitioners registered with a professional body</p> <p>Develop the National extension development plan</p>	<p>DAFF</p> <p>DAFF</p> <p>DAFF</p> <p>DAFF</p>
<p>Facilitate a pluralistic and integrated approach to provide extension and advisory services</p>	<p>Pluralistic and integrated approach is facilitated</p>	<p>Establish Extension Coordinating Forums</p> <p>Establish a provincial directorate for extension and advisory services</p> <p>Facilitate development of provincial strategies for extension and advisory services</p>	<p>PDAs and DAFF</p> <p>PDAs</p> <p>PDAs and ARC</p>
<p>Improve extension education system and broaden service focus</p>	<p>Extension education system and service focus is improved</p>	<p>Review the core competencies and curricula of extension</p> <p>Facilitate/influence the revision of extension curriculum by Department of Higher Education</p> <p>Develop a database of extension practitioners who graduated from the continuous professional development</p>	<p>DAFF, PDAs, SACNASP & DHE</p> <p>DAFF, PDAs, SACNASP & DHE</p> <p>DAFF</p>



TABLE 1: IMPLEMENTATION FRAMEWORK

POLICY INTERVENTIONS	OUTPUT	KEY MILESTONES	RESPONSIBILITY (LEAD DEPARTMENT)
Promote commodity value chain development approach	Commodity value chain development approach is promoted	Develop a database of extension practitioners and actors trained in the value chain approach Increase the number of smallholder producers participating in commodity value chains (considering female producers participating in commodity value chains) Integrate marketing and value chain aspect into extension and advisory services activities Facilitate the linkages of producers and extension practitioners with commodity organisations	DAFF and PDAs PDAs and DAFF PDAs and DAFF DAFF and PDAs



10. BIBLIOGRAPHY

- ABEGAZ, H, 2009. *The pilot project on aquaculture development in Ethiopia – bridging the gap of fish seed demand through hatchery establishment and village based extension approach*. Addis Ababa: Ministry of Agriculture and Rural Development.
- AFRICAN DEVELOPMENT BANK, 2001. *Malawi: Agricultural Sector Adjustment programme II - Project Performance Evaluation Report* [Online]. Available: <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Evaluation-Reports/00684463-EN-MALAWI-AGRICULTURAL-SECTOR-ADJUSTMENT.PDF> [Accessed 15 August 2012].
- AGARWAL, B, 2001. Participatory Exclusions, Community Forestry, and Gender: An Analysis for South Asia and a Conceptual Framework. *World Development*, 29, 1623-1648.
- AGRICULTURAL DIGEST, 2005/2006. Online publication www.nda.agric.za/daoDev/sideMenu/links/Digest6.htm.
- ALEX, G, ZIJP, W, and BYERLEE, D, 2002. Rural extension and advisory services: new directions. Washington, DC: The World Bank Agriculture and Rural Development Department *Rural Development Strategy Background Paper* 9.
- ALEX, G, BYERLEE, D, HELENE-COLLION, M. and RIVERIA, W, 2004. Extension and rural development: converging views on institutional approaches? Washington, DC: World Bank *Agriculture and Rural Development Discussion Paper* 4.
<http://siteresources.worldbank.org/INTARD/825826-11129171182/20431824/DiscussionPaper4Final.pdf> [accessed 10 August, 2012]
- ALIBER, M, BAIPHETHI, M, DE SATGE, R., DENISON, J, HART, T, JACOBS, P, VAN AVERBEKE, W, ALCOCK, R, ANTWI, M, BELETE, A, COUSINS, B, FIELD, L, MARIGA, I, MASIKA, P, MATERCHERA, S, MAYSON, D, MONDE, N. and TAPELA, B, 2010. Strategies to support South African smallholders as a contribution to government's second economy strategy. Volume 1: Situation analysis, fieldwork findings and main conclusions. In: ALIBER, M. (ed.) *Research report 41*. Cape Town: Institute for Poverty, Land and Agrarian Studies.
- ANC, 1994. ANC Agriculture Policy <http://www.anc.org.za/show.php?id=274>
- ANDERSON, J, and FARRINGTON, J, 1996. *Forestry extension: facing the challenges of today and tomorrow*. Rome: FAO: *Unasylva* 184.
<http://www.fao.org/docrep/v9122e/v9122e02.htm#Forestry%20extension:%20facing%20the%20challenges%20of%20today%20and%20tomorrow> [accessed 9 August, 2012]
- ANDERSON, J, and BIRNER, R, 2007. *How to make agricultural extension demand driven? The case of India's extension policy* [Online]. Washington DC: International Food Policy Research Institute. Available: www.ifpri.org/sites/default/files/publications/IFPRI0729.pdf [Accessed 15 July 2012].
- ANYONGE, C.H, 2002. *Forest extension: equitable partnerships for sustainable multi-functional forestry*. Rome: FAO: Paper prepared for IUFFRO Division 6 meeting, Valdivia, Chile, 11-17 November.
- ATA, 2012. <http://www.ata.gov.et/about/> [accessed 25 August, 2012]
- BERRY, L., 2003. *Land degradation in Ethiopia: its extent and impact*. ftp://ftp.fao.org/agl/agll/ladadocs/ETHIOPIA_LD_CASE_STUDIES.doc [accessed 25 August, 2012]
- ARBOLEYA, J. AND RESTAINO, E., 2004. Agricultural extension models in South America: a description of systems in use in Argentina, Brazil, Paraguay, and Uruguay. *Hort Technology* 14: 14-19.
- BARGAWI, H, and OYA C, 2009. Agribusiness for Development: Who Really Gains?: Perspectives from the Journal of Agrarian Change. *Development Viewpoint*. Centre for Development Policy and Research, School of Oriental and African Studies, University of London. Development Viewpoint Number 36, September 2009.

- BIENTEMA, N, MWENDA, A, and MTUKUSO, A, 2004. *Malawi* [Online]. IFPRI. Available: www.asti.cgiar.org/pdf/Malawi_CB22.pdf [Accessed 20 August 2012].
- BIGGS, S. D, 1995. Farming systems research and rural poverty: Relationships between context and content. *Agricultural Systems*, 47, 161-174.
- BLANC, J, NOE, E, BURMA, J, BURNETT, M, COMPAGNONE, C. AND MARRACCINI, E, 2010. The role and attitudes of agricultural advisors in implementing sustainable pest management in European agriculture – a cross national case study in NL, FR, UK and DK. Paper presented to 9th European IFSA Symposium, 4-7 July, Vienna. http://ifsa.boku.ac.at/cms/fileadmin/Proceeding2010/2010_WS4.4_Blanc.pdf [accessed 24 August 2012]
- BLOMEYER, R, GOULDING, I, PAULY, D, SANZ, A. and STOBBERUP, K, 2012. *The role of China in world fisheries*. Brussels: Policy Department B: Structural and Cohesion Policies: European Parliament. <http://www.europarl.europa.eu/committees/en/studiesdownload.html?languageDocument=EN&file=74791> [accessed 23 August, 2012]
- BLUM, M.L, 2007. *Trends and challenges in agricultural extension – policies and strategies for reform*. Rome: FAO Research and Extension Division: presentation to workshop on *Building partnerships for technology generation, assessment and sharing in agriculture among West Balkan countries*, Skopje, 27-29 June. <http://www.fao.org/fileadmin/templates/nr/images/research/skopje/Presentation2.pdf> [accessed 10 August, 2012]
- BJORN, C, nd. *The idea and basics of co-operation – global perspectives and Danish tradition*. <http://www.uwcc.wisc.edu/icic/orgs/ica/pubs/review/vol-88/idea.html> [accessed 24 August, 2012]
- BOGETOFT, P, STRANGE, N. and THORSEN, B.J, 2001. Efficiency and merger gains in the Danish Forestry Extension Service. Frederiksberg: Royal Veterinary and Agricultural University Food and Economics Research Institute: *Unit of Economics Working Paper 2001/8*. <http://ageconsearch.umn.edu/bitstream/24210/1/ew010008.pdf> [accessed 25 August, 2012]
- BUNDY, C, 1988. *The rise and fall of South African Peasantry*. David Phillip, Cape Town.
- CABRAL, L, and SCOONES, I, 2006. *Narratives of Agricultural Policy in Africa: What Role for Ministries of Agriculture?* [Online]. Brighton: Future Agricultures Consortium. Available: http://www.dfid.gov.uk/r4d/PDF/Outputs/futureagriculture/FAC_Research_Paper_No1.pdf [Accessed 30 July 2012].
- CAMMACK, D, CHULU, O, KHAILA, S, and NG'ONG'OLA, D. nd. *Malawi Food Security Issues Paper: Draft for Forum on Food Security in Southern Africa* [Online]. London: Overseas development Institute. Available: <http://www.odi.org.uk/work/projects/03-food-security-forum/docs/malawicip.pdf> [Accessed 15 August 2012].
- CARDNO, 2011. *Final technical report: training for fisheries management planning in Ethiopia*. <http://acpfish2-eu.org/uploads/projects/ld18/Final%20Report%20-%20April%202011.pdf> [accessed 25 August, 2012]
- CARDOSO-LEITE, E, PINÁ-RODRIGUES, F.C.M, COSTA JUNIOR, E.A, GONÇALVES, P.K, PODADERA, D.S. AND RUAS, N.B, 2010. *Agricultural extension in agro-forestry and empowerment of rural communities in South Eastern Brazil*. Paper presented to conference on Innovation and Sustainable Development in Agriculture and Food, Montpellier, 28 June – 1 July.
- CARTER, J, and GRONOW, J, 2005. Recent experience in collaborative forest management. *CIFOR Occasional Paper No. 43*. Bern: Centre for International Forestry Research.
- CENTRE FOR RURAL LEGAL STUDIES, LAND DEVELOPMENT UNIT, LEGAL RESOURCES CENTRE, PROGRAMME FOR LAND AND AGARIAN STUDIES, SURPLUS PEOPLE PROJECT & TRUST FOR COMMUNITY OUTREACH AND EDUCATION 2000. The Integrated Programme of Land Redistribution and Agricultural Development: A Response from NGOs. Paper presented at the Minister of Agriculture and Land Affairs' *Indaba on the Implementation of the Integrated Programme of Land Redistribution and Agricultural Development*, Caesar's Palace, Johannesburg, 6–7 November 2000.
- CHADDAD, F.B, and JANK, M.S, 2006. The evolution of agricultural policies and agribusiness development in Brazil. *Choices* 21:2. <http://www.choicesmagazine.org/2006-2/tilling/2006-2-08.htm> [accessed 19 August, 2012]

- CHESHER, R, 1998. *The Samoa Fisheries Extension and Training Project*. United Nations Economic and Social Commission for Asia and the Pacific: http://www.unescap.org/drpdp/vc/conference/bg_ws_4_sfe.htm [accessed 9 August, 2012]
- CHINSINGA, B 2008. *The Malawi Fertiliser Subsidy Programme: Politics and pragmatism* [Online]. Sussex: Future Agricultures. Available: www.futureagricultures.org [Accessed 15 August 2012].
- CHIPETA, S, 2010. *Agricultural advisory services in Denmark: how to get knowledge to work*. Presentation to GCARD, Montpellier. <http://www.fao.org/docs/eims/upload/277058/Denmark.pdf> [accessed 25 August, 2012]
- CHISINGA, B, 2008. *Ministries of Agriculture: Structures, Capacity and Coordination at District Level in Malawi. Research Paper 013*. Brighton: Future Agricultures Consortium.
- CHONCO, J.M, (2009) *Factors Influencing Choices of Grazing Lands made by Livestock Keepers in Enhlanokhombe in Ukhahlamba (Drakensberg), KwaZulu-Natal* Master's Thesis. University of KwaZulu-Natal
- CHOUDHARY, B, and GUAR, K, 2008. *Trust in the seed* [Online]. New Delhi: International Service for the Acquisition of Agri-Biotech Applications. Available: http://www.isaaa.org/resources/publications/trust_in_the_seed/download/english/ISAAA-Trust%20in%20the%20Seed.pdf [Accessed 18 July 2012].
- CHRISTOPOLOS, I, FARRINGTON, J, and KIDD, A.D. 2000. *The Neuchâtel Initiative 2000: Extension, Poverty and Vulnerability*. Inception Report. London, ODI Rural Policy and Environment Group.
- CHRISTENSEN, D. AND SRISKANDARAJAH, N., 2008. *A social learning perspective on the practice, rationale and condition of agricultural extension in Denmark with a rural development focus*. Presentation to 8th IFSA Symposium, Clermont-Ferrand, 6-10 July. http://fsa.boku.ac.at/cms/fileadmin/Proceeding2008/2008_WS6_12_Christensen.pdf [accessed 25 August, 2012].
- CHRISTOPOLOS, I, 2010. *Mobilising the potential of rural and agricultural extension*. Rome: FAO. <http://www.fao.org/docrep/012/i1444e/i1444e00.pdf> [accessed 24 August, 2012]
- Clarke, J, and Isaacs, M, 2005. *Forestry contractors in South Africa: what role in reducing poverty?* Programme for Land and Agrarian Studies, University of the Western Cape and International Institute for Environment and Development, London, UK. pubs.iied.org/pdf/9558IIED.pdf
- CLARKE, J.M, 2012. *Investigation of Working Conditions of Forestry Workers in South Africa*. Report Prepared for the Department of Agriculture, Forestry and Fisheries. DAFF, 2012.
- COUSINS, B, 2012. *Land reform in post-apartheid South Africa*. Online publication. <http://www.lalr.org.za/news/land-reform-in-post-apartheid-south-africa-2013-disappointingharvest-by-ben-cousins/> Accessed July 2012
- CRFM, 1995. *Report of the CTA/CRFM training of trainers workshop for fisheries extension officers to enhance their skills to provide better information, advisory and training services to primary and national fisher folk organisations. CRFM Technical and Advisory Document 2007/1*. Belize City and Kingstown: CRFM. <http://www.caricom-fisheries.com/LinkClick.aspx?fileticket=HdzketDX6BI%3D&tabid=87> [accessed 9 August, 2012]
- CROSOER, D, L VAN SITTERT and PONTE, S, 2006. *The integration of South African fisheries into the global economy*. Marine Policy 30, p18–29
- DAVIS, K.E, 2008. *Extension in sub-Saharan Africa: overview and assessment of past and current models, and future prospects*. *Journal of International Agricultural and Extension Education* 15: 15-28. http://www.iaee.org/attachments/111_Davis-Vol-15.3-2.pdf [accessed 9 August, 2012]
- DAFF, 2012a. *Agriculture, Forestry and Fisheries: Integrated Growth and Development Plan*. Pretoria: Department of Agriculture, Forestry and Fisheries.
- DAFF, 2012b. *Strategic plan for the Department of Agriculture, Forestry and Fisheries 2012/12 - 2016/17*. Pretoria: Department of Agriculture, Forestry and Fisheries.

- DE, H.K. and SAHU, B.B. 2001. Privatising fisheries extension - policy implications. In: SHEKARA, C., P (ed.) *Private Extension in India: Myths, Realities, Apprehensions and Approaches*. Hyderabad: MANAGE.
- DEAT, 2005. *General Policy on the Allocation and Management of Long Term Commercial Fishing Rights, 2005*. DEAT: Pretoria
- DEAT, 2009. *Policy on Transfer of Commercial Fishing Rights*. Government Gazette, South Africa 32449.
- DEPARTMENT OF AGRICULTURE (DOA), 1998. Agricultural policy in South Africa: a discussion document. Internet document. Online publication <http://www.nda.agric.za/docs/policy98.htm> Accessed July 2004
- Development Bank of Southern Africa (DBSA), 2005. Development Report: Overcoming underdevelopment in South Africa's second economy. DBSA, Halfway House.
- DAFF, 2010. *Integrated Growth and Development Plan 2011-2031: Agriculture, Forestry and Fisheries*. DAFF. Pretoria
- DAFF, 2011. *National Framework for Extension Recovery Plan*. DAFF, Pretoria.
- DAFF, 2012. *Abstract of Agricultural Statistics 2012*. Directorate Statistics and Economic Analysis, Pretoria.
- DOA, (nd), *Comprehensive Agricultural Support Programme (CASP) Draft Progress Report 2003 – 2005*
- De WET, C, 1987. Land tenure and rural development: some issues relating to the Transkei/Ciskei region. *Development Southern Africa*, 43: 459 - 478.
- De VILLIERS, J, 2005. *A Strategy to Improve Agricultural Production in a Rural Community through On-Farm Research and Technology Transfer*. PhD Thesis. University of KwaZulu-Natal
- DUVEL, G, 2000. Towards an Appropriate Extension Approach for Agricultural and Rural Development in South Africa. *South African Journal of Agricultural Extension*, 29, pp. 10-23.
- DREZE, J, and SEN, A, 1989. *Hunger and Public Action*, Oxford, Clarendon Press.
- EDD. 2011. *The New Growth Path: What is expected from the agricultural sector*, [Online]. Pretoria: Economic Development. Available: <http://www.google.co.za/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0CDYQFJAB&url=http%3A%2F%2Fwww.economic.gov.za%2Fcommunications%2Fspeeches%2Fminister%2F2011%2F119-agrifa%2Fdownload&ei=FRSIT-ngD4SzhAIB1929CQ&usq=AFQICNF57llm24c1sD05Aib7rFRVzUk3XQ&sig2=2ALQEF6hetYfadH2hPp3Q> [Accessed 11 April 2012].
- DWAF, 1996. Sustainable forest development in South Africa. The Policy of the Government of National Unity. (White Paper). Department of Water Affairs and Forestry, 1996.
- DWAF, 1997. South Africa's National Forestry Action Programme. Department of Water Affairs and Forestry, 1997.
- DWAF, 2005. Draft Key Issues Paper on Forestry and Poverty in South Africa. Document prepared by Department of Water Affairs and Forestry with funding from UK Department for International Development (DFID).
- EICHER, C.K, 2007. *Agricultural extension in Africa and Asia*. Ithaca: World Ag-Info Project, Cornell University.
- ELLIS, A.M.P, 2010. *HB 4011 Agriculture and Fisheries Extension Act of 2010*. <http://www.aham.org.ph/legislation/bills/authored/hb-4011-agriculture-and-fisheries-extension-act-of-2010.html> [accessed 22August, 2012]
- ESTEVA, G, 1993. Development. In: SACHS, W. (ed.) *The development dictionary: A guide to knowledge as power*. London: Zed Books.
- ETC EAST AFRICA, 2006. *Inventory of Agricultural Extension Service Providers in Kenya: Draft final report* Nairobi: KARI/KAPP.
- FALCONER, J, 1987. *Forestry extension: a review of the key issues*. London: Overseas Development Institute Social Forestry Network *Network Paper 4e*.
- FAO, 1993. *Fisheries Management South-East Arm of Lake Malawi, Upper Shire River and Lake Malombe*. CIFA *Technical Paper 21*. GOM/FAO/UNDP Chambo Fisheries Research Project.

FAO, 2002. *State of World Fisheries and Aquaculture*, FAO, Rome.

FAO, 2004. *The State of World Fisheries and Aquaculture 2004*, Sofia Conference, Sofia, Bulgaria.

FAO, 2004. *Aquaculture extension in sub-Saharan Africa*. Rome: *FAO Fisheries Circular 1002*.
<ftp://ftp.fao.org/docrep/fao/007/y5641e/y5641e00.pdf> [accessed 18 August, 2012]

FAO, 2005. *Equitable partnerships, markets and forest extension*.
<http://www.fao.org/forestry/partnerships/en/> [accessed 10 August, 2012]

FAO, 2006. *Guiding Principles for Promoting Aquaculture in Africa: Benchmarks for Sustainable Development*, FAO, Rome.

FAO, 2007. *The State of World Fisheries and Aquaculture 2006*, FAO, Rome.
George Warman Publications. 2008. *Fishing Industry Handbook: South Africa, Namibia and Mozambique*.
George Warman Publications: Cape Town.

FAO, 2009. A review of experiences of establishing emerging farmers in South Africa: Case lessons and implications for farmer support within land reform programmes. FAO: Rome

FAO, 2010. *The state of the World Fisheries and Aquaculture* [Online]. Rome: Food and Agriculture Organisation of the United Nations. Available: <http://www.fao.org/docrep/013/i1820e/i1820e.pdf> [Accessed 16 July 2012].

FAO, 2012. *State of World Fisheries and Aquaculture*. FAO, Rome

FAO, 2012a. *Fishery and aquaculture country profiles: China*. http://www.fao.org/fishery/countrysector/FI-CP_CN/en [accessed 23 August, 2012]

FAO, 2012b. *National aquaculture sector overview: Denmark*.
http://www.fao.org/fishery/countrysector/naso_denmark/en [accessed 25 August, 2012]

FAO, 2012c. *Fishery and aquaculture country profiles: Ethiopia*.
http://www.fao.org/fishery/countrysector/FI-CP_ET/en [accessed 25 August, 2012]

FARRINGTON, J, CHRISTOPLOS, I, and KIDD, AD, 2002. *Extension, Poverty and Vulnerability: The Scope for Policy Reform*. Final report of a study for the Neuchâtel Initiative. London: ODI Rural Policy and Environment Group, available online at: www.odi.org.uk/publications/working_papers/wp155_a.pdf. Accessed September 2005.

FEIKE, 2008. *Fishinc. A guide to South African Commercial Fishing Industry*.

FINANCIAL MAIL, 2010. Planting S. 'State of the fishing industry: Slippery business'. *Financial Mail* 17 June 2010.

FONDO, E, 2004. *Assessment of the Kenyan Marine Fisheries from Selected Fishing Areas* [Online]. Reykjavik: United Nations University Fisheries Training Programme. Available: www.unuftp.is/static/fellows/document/estherprf04.pdf [Accessed 10 September 2012].

FOREST GOVERNANCE LEARNING GROUP, 2011. *Making community based forest management work* [Online]. International Institute for Environment and Development. Available: <http://pubs.iied.org/pdfs/G03130.pdf?> [Accessed 15 August 2012].

FOREST RESEARCH INSTITUTE OF MALAWI, 2010. *Guidelines for co-management* [Online]. Available: <http://www.cabi.org/gara/FullTextPDF/2010/20103040884.pdf> [Accessed 15 August 2012].

FSA, 2010a. SA Forest Industry, 2010. Power point slides provided by Forestry South Africa

FSA, 2010b. Ownership Pattern of SA Forests – 2010. Excel table provided by FSA.

FULTON, A, FULTON, D, TABART, T, BALL, P, CHAMPION, S, WEATHERLEY, J and HEINJUS, D, 2003. *Agricultural Extension, Learning and Change: A Report for the Rural Industries Research and Development Corporation*. May 2003. RIRDC Publication No 03/032. RIRDC Project No RDP-1A. Rural Industries

Research and Development Corporation, Canberra, Australia. Online publication: <http://www.rirdc.gov.au/reports/HCC/03-032.pdf>. Accessed November 2005.

GARFORTH, C, 1991. *Seeing the people for the trees: Implications of social forestry for the training of forestry extension staff in Karnataka - South India* [Online]. London: Overseas Development Institute. Available: <http://www.odi.org.uk/resources/docs/1016.pdf> [Accessed 15 August 2012].

GEORGE WARMAN PUBLICATIONS, 2007. *Fishing Industry Handbook: South Africa, Namibia and Mozambique*. George Warman Publications: Cape Town.

GENESIS, 2005. The contribution, costs and development opportunities of the Forestry, Timber, Pulp and Paper industries in South Africa. Final report – 29 June 2005. www.dwaf.gov.za/webapp/files/uploads/Documents/Genesis_part_1.pdf [accessed 23 Jan 2012]

GEYER, H, 2012. *The poverty trap: Agricultural support initiatives within the National Spatial Development Perspective. Strategies to overcome poverty and inequality: Towards Carnegie III*. Cape Town: University of Cape Town.

GITAU, R, KIMENJU, S, KIBAARA, B, NYORO, J, BRUNTRUP, M, and ZIMMERMAN, R, 2008. *Agricultural policy making in sub-Saharan Africa: Kenya's past policies* [Online]. Nairobi: Tegemeo Institute of Agricultural Policy and Development, German Development Institute. Available: <http://www.oerafrica.org/FTPFolder/Agshare/Agribusiness/resources/Module%201/M1L3/Agricultural%20Policy%20Making%20in%20Sub%20Saharan%20Africa.pdf> [Accessed 15 August 2012].

GLENDENNING, C. B, SURESH and ASENSO-OKYERE, K, 2010. *Review of agricultural extension in India: Are farmers' needs being met?* [Online]. Washington DC: International Food and Policy Research Institute. Available: www.ifpri.org/sites/default/files/publications/ifpridp01048.pdf [Accessed 15 July 2012].

GOVERNMENT OF MALAWI, 2006. *Malawi Growth and Development Strategy: From Poverty to Prosperity 2006-2011*. Lilongwe: Government of Malawi.

GOVERNMENT OF INDIA, 2000. *Policy framework for agricultural extension* [Online]. Extension Division, Department of Agriculture and Cooperation, Ministry of Agriculture. Available: <http://agricoop.nic.in/policy/framework.htm> [Accessed 15 July 2012].

GOVERNMENT OF INDIA, 2010. *Guidelines for modified 'support to state extension programmes for extension reforms' scheme* [Online]. New Delhi: Department of Agriculture and Co-operation, Ministry of Agriculture. Available: vistar.nic.in/projects/revise_ATMA_Guidelines.pdf [Accessed 28 July 2012].

GOVERNMENT OF INDIA, 2012a. *Annual Report 2011-12* [Online]. New Delhi: Ministry of Environment and Forests. Available: <http://moef.nic.in/report/report.html> [Accessed 16 July 2012].

GOVERNMENT OF INDIA, 2012b. *Annual Report 2011-2012*: [Online]. Department of Agriculture and Co-operation, Ministry of Agriculture. Available: <http://www.agricoop.nic.in> [Accessed 12 July 2012].

GOVERNMENT OF KENYA, 2007. *National Agricultural Sector Extension Policy - Implementation Framework*. Nairobi: National Extension Task Force: Ministry of Agriculture, Ministry of Livestock and Fisheries Development, Ministry of Co-operative Development and Marketing.

GOVERNMENT OF MALAWI, 1987. *Statement of Development Policies*. Zomba: Government of Malawi.

GOVERNMENT OF MALAWI, 1996. *Environmental Management Act of 1996*. Lilongwe: Government of Malawi.

GOVERNMENT OF MALAWI, 1997. *Revised Fisheries Act*. Zomba: Government of Malawi.

GOVERNMENT OF MALAWI, 2009. *Census of Fisheries, Fishing Gears and Fishing Crafts in Lakes and Rivers of Malawi*. Department of Fisheries.

GOVERNMENT OF MALAWI, 2010. *The Agriculture Sector Wide Approach (ASWAp): Malawi's prioritised and harmonised Agricultural Development Agenda* [Online]. Lilongwe: Ministry of Agriculture and Food Security. Available: www.caadp.net/pdf/Investment%20plan%20-%20Malawi.pdf [Accessed 15 August 2012].

- GROENEWALD (Eds.), nd. *The Challenge of Change: Agriculture, Land and the South African Economy*. Pietermaritzburg: University of Natal Press.
- GRONOW, J, and SHRESTHA, N.K, 1990 From policing to participation: reorientation of Forest Department field staff in Nepal. *Winrock Research Report Series No. 11*. Kathmandu: Winrock International.
- GUGGENHEIM, S. and SPEARS, J, 1991. Sociological and environmental dimensions of social forestry projects. In Cernea, L. (ed.), *Putting people first. Sociological variables in rural development*. Washington, DC/ London: World Bank/Oxford University Press.
- GULATI, A, JOSHI, P. K. and LANDES, M, 2008. *Contract farming in India: A Resource Book* [Online]. ICAR, IFPRI, USDA. Available: http://www.ncap.res.in/contract_%20farming/ [Accessed 20 July 2012].
- HALL, R, 2004. A political economy of land reform in South Africa. *Review of African Political Economy*, 31, 213 - 227.
- HALL, R. (ed.), 2009. *Another Countryside? Policy options for land and agrarian reform in South Africa*, Cape Town: Institute for Poverty, Land and Agrarian Studies.
- HALL, R, and ALIBER, M, 2010. The Case for Re-Strategising Spending Priorities to Support Small- Scale Farmers in South Africa. PLAAS University of the Western Cape
- HARA, M, 2001. *Could Co-management Provide a Solution to the Problems of Artisanal Fisheries Management on the Southeast Arm of Lake Malawi?* PhD thesis, University of the Western Cape.
- HARA, M, 2003. Co-management of Natural Resources: Theory and the Attendant Assumptions. In Hauck M, Sowman M. (eds). *Waves of Change: Coastal and Fisheries Co-management in Southern Africa*. University of Cape Town Press: Cape Town. 13-36.
- HARA, M, 2004. Beach village committees as a vehicle for community participation: Lake Malombe/Upper Shire River Participatory Programme. In Fabricius, C., Koch, E., Magome, H. and Turner, S.D. (eds.), *Rights, resources and rural development. Community-based natural resource management in southern Africa* pp 182-193 London: Earth Scan.
- HARA, M, and RAAKJAER J, 2009. Policy evolution in South African fisheries: the governance of the sector for small pelagic. *Development Southern Africa* Vol. 26, No. 4, October 2009. pp649-662.
- HARA, M, and NGWEXANA B, 2011. (unpublished). Recommendations for Revisions to Inland Fishery Property Rights Regimes and Access Rights (Deliverable 10). Report to the Water Research commission. Baseline and scoping study on the development and sustainable utilisation of storage dams for inland fisheries and their contribution to rural livelihoods (Project Title: K5/195/4). PLAAS, UWC. Cape Town
- HARRIS, J.G, BRANCH, C, SIBIYA, C, nd. The Sokhulu Subsistence Mussel-Harvesting Project. In Hauck M, Sowman M. (eds). *Waves of Change: Coastal and Fisheries Co-management in Southern Africa*. University of Cape Town Press: Cape Town. 13-36.
- HANYANI-MLAMBO, BT, 2000. Strengthening the Pluralistic Agricultural Extension System: A Zimbabwe Case Study. Rome: FAO.
- HAUCK M and SOWMAN M, nd. Introduction. In Hauck M and Sowman, M (eds). *Waves of Change: Coastal and Fisheries Co-management in Southern Africa*. University of Cape Town Press: Cape Town. 1 -12.
- HAYWARD, J AND BOTHA, C (1995) Extension, training and research. In R. Singini & J. Van Rooyen (Eds.), *Serving small scale farmers: An evaluation of DBSA's farmer support programmes*. Halfway House: Development Bank of Southern Africa.
- HAZELL, P. 2002. *Green Revolution: Blessing or curse?* [Online]. IFPRI. Available: <http://www.ifpri.org/sites/default/files/pubs/pubs/ib/ib11.pdf> [Accessed 16 July 2012].
- HEALEY, P, and UPTON, R, (eds.) 2010. *Crossing borders: International exchange and planning practices*, London: Routledge.

- HERSOUG, B. and RÅNES, S.A. 1997. What is good for the fishermen is good for the nation: Co-management in the Norwegian fishing industry in the 1990s. *Ocean and Coastal Management*, Vol. 35, No. 2-33. Pp157-172.
- HIRAKURI, S.R. 2007. Sustainable forest management and law enforcement: a comparison between Brazil and Finland. In Tacconi, L. (ed.): *Illegal logging: law enforcement, livelihoods and the timber trade*. London: Earth Scan.
- HU, R., YANG, Z., KELLY, P. and HUNAG, J. 2008. Agricultural extension system reform and agent time allocation in China. *China Economic Review*. <http://www.ccap.org.cn/uploadfile/2009/0706/20090706094746562.pdf> [accessed 22 August, 2012]
- HU, R., CAI, Y., CHEN, K.Z., CUI, Y. and HUANG, J. 2010. Effects of inclusive public agricultural extension service. Results from a policy reform project in Western China. Washington, D.C.: *IFPRI Discussion Paper* 01037.
- HUANG, M. 2003. Republic of China. In Sharma, R. (ed.), *Integration of agricultural research and extension. Report of the APO study meeting on integration of agricultural research and extension. Philippines, 18-22 March 2002*, pp 118-130. Tokyo: Asian Productivity Organisation. <http://www.apo-tokyo.org/publications/files/agr-08-lare.pdf> [accessed 18 August 2012]
- HUTTON, T., RAAKJAER J., NIELSEN, N. and MAYEKISO M. 1999. Government-industry co-management arrangements within the South African deep-sea hake fishery. Paper presented at the International Workshop on Fisheries Co-management. Penang, Malaysia.
- IFPRI, 2012. *Extension and advisory services in Ethiopia*. <http://www.worldwide-extension.org/africa/ethiopia/s-ethiopia> [accessed 25 August, 2012]
- ISAACS, M. 2003. Understanding the social processes and politics of implementing a new fisheries policy, the Marine Living Resource Act 18 of 1998, in South Africa. PhD thesis, University of Western Cape, South Africa.
- ISAACS, M. 2006. 'Small-scale fisheries reform: Expectations, hopes and dreams of "a better life for all"'. *Marine Policy* 30:51-59.
- ISAACS, M., HARA M., RAAKJAER, J. 2007. Has reforming South African fisheries contributed to wealth redistribution and poverty eradication? *Ocean and Coastal Management*. 50 (2007). pp301-313.
- ISAACS, M. 2011. Paradigm shift – from Individual Transferable Quotas (ITQs) to collective allocations – a struggle for small-scale fishers in South Africa. *MAST*. Special issue on human rights based approach to fisheries.
- ISHS, 2012. *EMBRAPA and ISHS sign a partnership agreement*. <http://www.ishs.org/partners/embrapa/> [accessed 19 August, 2012]
- JENTOFT, S. 1989. Fisheries co-management: Delegating government responsibility to fishermen's organisations. *Marine policy* April 1989, pp 137-154.
- JENTOFT, S. and MIKALSEN K.H. 1994. Regulating Fjord Fisheries: Folk Management or Interest Group Politics?. In Dyer, C.L. and McGoodwin, J.R. (eds.): *Folk Management in the Worlds Fisheries: Lessons for Modern Fisheries Management*. University Press of Colorado. Colorado. pp 286-316.
- JONES, G.E. and GARFORTH, C. 1997. The history, development, and future of agricultural extension. In Swanson, B.E., Bentz, R.P. and Sofranko, A.J. (eds.): *Improving agricultural extension: a reference manual*. Rome: FAO.
- JUNGELING, I. 1993. *Guidelines on fisheries extension in the Bay of Bengal region*. Madras: FAO Bay of Bengal Programme. <http://ftp.fao.org/docrep/fao/field/006/ad480e/ad480e00.pdf> [accessed 9 August, 2012]
- KAMOTO, J., DORWARD, P. and SHEPHERD, D. 2008. *Decentralised governance of forest resources: Analysing devolution processes and their effects on decision making in communal forest management in Malawi* [Online]. University of Gloucestershire. Available: http://iasc2008.glos.ac.uk/conference%20papers/papers/K/Kamoto_213701.pdf [Accessed 2012]

KANYINGA, K, 2000. Redistribution from above: The politics of land and squatting in Coastal Kenya. Research Report No 115. Uppsala: Nordiska Afrika Institute.

KASSA, B, nd. Agricultural research and extension linkages in Ethiopia: a historical survey.

http://www.google.co.za/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&ved=0CCcQFJAA&url=http%3A%2F%2Fwww.orafrica.org%2FFTPFolder%2FWebsite%2520Materials%2FAgriculture%2FPharamaya%2FPerspective_Agricultural_Extension%2FAICM%2520Module%2520Final%2520Jan%252031%2C%25202012%2FPaper_on_research_extension_ligake21_Share.doc&ei=3as4ULviH5HLAak6ICYAg&usq=AFQjCNFMzSqHQyVOi5INqdVCnyJJuqmFiw [accessed 25 August, 2012]

KIDANE, T, and WORTH, S, 2012. A review of Agricultural Education and Training in South Africa. African Journal of Agricultural Research Vol. 7(18), pp. 2741-2750,

KINGON, J.R.L, 1915. Native Agriculture. South African Journal of Science. 12 (5), 178-191.

KIRSTEN, J, VAN ZYL, J and VAN ROOYEN, C.J, 1994. An overview of agricultural policy in South Africa. Regional Policy Analysis Network Workshop, Harare.

KIRSTEN, J.F, and VAN ZYL, J, 1996. The costs and benefits of providing agricultural support services to rural households in the developing areas of South Africa. Development Southern Africa, 13(3), 415-428.

KIRSTEN, J and VINK, N, 2003. Agricultural Policy changes in South Africa 1996-2002 Paper prepared for the Roles of Agriculture International Conference, 20-22 October, 2003 – Rome, Italy

KUMARAN, M, VIMALA, D.D, CHANDRASEKARAN, V.S, ALAGAPPAN, M, and RAJA, S, 2012. Extension Approach for an Effective Fisheries and Aquaculture Extension Service in India. The Journal of Agricultural Education and Extension, 18, 247-267.

LAHIFF, E, 2008. Land Reform in South Africa: A Status Report 2008: Programme for Land and Agrarian Studies research report no. 38 Programme for Land and Agrarian Studies, School of Government, University of the Western Cape, Cape Town, South Africa.

LELE, U, VIANA, V, VERISSIMO, A, VOSTI, S, PERKINS, K, and HUSAIN, S.A, 2000. Brazil: forests in the balance: challenges of conservation with development. Washington, D.C.: The World Bank Operations Evaluation Department Evaluation Country Case Study Series.

[http://lnweb90.worldbank.org/oed/oeddoclib.nsf/b57456d58aba40e585256ad400736404/d985594af11dfb185256970007c1acc/\\$FILE/BrazilCS.pdf](http://lnweb90.worldbank.org/oed/oeddoclib.nsf/b57456d58aba40e585256ad400736404/d985594af11dfb185256970007c1acc/$FILE/BrazilCS.pdf) [Accessed 19 August, 2012]

LEMON, A, 1991. The Apartheid City. In: A. Lemon (Ed.), Homes Apart: South Africa's Segregated Cities. Cape Town: David Phillip.

LOBE, K, and BERKES, F, 2004. The padu system of community-based fisheries management: change and local institutional innovation in south India. Marine Policy, 28, 271-281.

LIU, J, AND LIXIA, Z, 2009. De-collectivisation and privatisation contributed to sustainable forestry management and poverty eradication in China? Rome: FAO Forestry Policy and Institutions Working Paper 23. <ftp://ftp.fao.org/docrep/fo/012/k5453e/k5453e00.pdf> [accessed 23 August, 2012]

LUPIN, H.M, nd. Problems regarding extension of fisheries technology in developing countries.

http://fshn.ifas.ufl.edu/seafood/sst/AnnPdf/7th_154.pdf [accessed 19 August, 2012]

MALAWI GOVERNMENT, 1997. The Forestry Act.

MANDA, L, and MAKOWA, G, 2012. Country profile - Malawi [Online]. New Agriculturist. Available: <http://www.new-ag.info/en/country/profile.php?a=2488> [Accessed 20 August 2012].

MANSURI, G, 2004. Community-Based and -Driven Development: A Critical Review. The World Bank Research Observer, 19, 1-39.

- MAPILA, M, MAKWENDA, B, and CHITETE, D, 2010.** Elitism in the farmer organization movement in postcolonial Malawi. *Journal of Agricultural Extension and Rural Development* 2, 144-153.
- MAREDA, K, 2007.** *Literature Review: Community Knowledge Workers and Village-based Knowledge Systems* [Online]. Michigan State University. Available: <http://worldaginfo.org/files/Lit%20Review%20on%20Community%20Knowledge%20Workers%20and%20Village%20Knowledge%20Systems%20-%20Karim%20Maredia.pdf> [Accessed 24 July 2012].
- MACHETHE, C.L, 2004.** Agriculture and poverty in South Africa: can agriculture reduce poverty? Paper presented at the Overcoming Underdevelopment Conference held in Pretoria, 28-29 October 2004
- MATHU, W, 2007.** *Forest law enforcement and governance in Kenya.* Nairobi: Kenya Forest Service.
- MITCHELL, D, Henman-Wier, F, and Clarke, J, 2009.** Eastern Cape Indigenous Forest Management Audit. Regional Report. Study done for the Eastern Cape region of Department of Agriculture, Forestry and Fisheries.
- MINISTRY OF RURAL DEVELOPMENT, 2007.** *Brazilian national policy for rural extension and technical assistance.* Brasilia: Department of Family Farming and Department of Technical Assistance and Rural Extension, Ministry of Rural Development.
- MONDI, 2012.** Mondri reaches half way mark in land claims settlement. Munye (monthly newsletter published by Mondri).
- MULLER, 1992.** Research and the Development Bank of Southern Africa. Transformation: Critical Perspectives on Southern Africa. 18-19: 43-51
- MUYANGA, M, and JAYNE, T.S, 2006.** Agricultural extension in Kenya: Practice and policy lessons. *Working Paper 26.* Nairobi: Tegemeo Institute of Agricultural Policy and Development, Egerton University.
- MWANGELA, D.L, 2006.** *Towards appropriate institutional linkages for effective participatory and coordinated agricultural extension in Malawi.* Agricultural Extension MSc Thesis, University of Pretoria.
- MYERS, N, (ed.) 1993.** *The Gaia Atlas of Plant Management,* London: Gaia Books
- NAGEL, U.J, 1997.** Alternative approaches to organising extension. In Swanson, B.E., Bentz, R.P. and Sofranko, A.J. (eds.): *Improving agricultural extension: a reference manual.* Rome: Food and Agriculture Organisation of the United Nations.
- National Department of Agriculture (NDA), 2003. Norms and Standards for Agricultural Extension. NDA, Pretoria.
- NDA and DLA, 2008. Land and Agrarian Reform Project concept document
- NDA, 2005. National Education and Training Strategy for Agriculture and Rural Development in South Africa. NDA, Pretoria
- NEGI, S.S, 2008.** *Evolution of forestry extension and technology transfer – a case study from India.* Presentation to IUFRO symposium on 'Evolving challenges and changing expectations for forestry extension and technology: meeting needs of people and forests around the globe', Ottawa. http://www.iufroextension.org/IUFRO_PDFs/Negi_2.pdf [accessed 10 August, 2012]
- NEL, E.L, and BINNS, T, 2000.** *Rural self-reliance strategies in South Africa: community initiatives and external support in the former black homelands.* *Journal of Rural Studies*, 16 (3). pp. 367-377 (need permission to quote)
- NEUCHÂTEL GROUP, 1999.** Common Framework on Agricultural Extension. Paris: Neuchâtel Group, available online at: www.odi.org.uk/rpeg/cf_en.pdf. Accessed January 2002.
- NGOMANE, T, 2010.** From a Deficit-based to an Appreciative Inquiry Approach in Extension Programs: Constructing a Case for a Positive Shift in the Current Extension Intervention Paradigm. *Journal of International Agricultural Education and Extension* 177 (3): 57-68
- NG'ONG'OLA, C, 1992.** Land Problems in Some Peri-Urban Villages in Botswana and Problems of Conception, Description and Transformation of "Tribal" Land Tenure. *Journal of African Law*, 36, 140-167.

NJAYA, F.J., 2009. *The Lake Chilwa fishing household strategies in response to water level changes: Migration, conflicts and co-management*. PhD thesis, University of the Western Cape.

NPC, 2011. *National Development Plan: Vision for 2030*. Pretoria: National Planning Commission.

NIEUWOUDT, L. and **GROENEWALD, J.A.** (Eds.), *The Challenge of Change: Agriculture, Land and the South African Economy*. Pietermaritzburg: University of Natal Press.

NIELSEN, J.R. and **HARA, M.M.**, 2006. Transformation of South African industrial fisheries. *Marine Policy* 30. pp43-50.

NYIKAHADZOI, K., **HARA M.**, **RAAKJAER J.**, 2010. *Transforming ownership and governance: Lessons from capital intensive pelagic fisheries in South Africa and Zimbabwe*. *International Journal of the Commons* 4 (2): 663-682.

NYORO, J., 2002. *Agriculture and rural growth in Kenya* [Online]. Nairobi: Tegemeo Institute, Egerton University. Available: <http://www.tegemeo.org/viewdocument.asp?ID=33> [Accessed 15 August 2012].

OECD, 2005. *Agricultural policy reform in Brazil*. Paris: OECD Policy brief. OECD, nd. Denmark. <http://www.oecd.org/agriculture/agriculturalpoliciesandsupport/49150866.pdf> [accessed 25 August, 2012].

OECD [Organisation for Economic Co-operation and Development], (2006) *OECD Review of Agricultural Policies: South Africa – Highlights and policy recommendations*. OECD Publishing, Paris, 23–28 August 1999.

ORDEN, D., **TORERO, M.** and **GULATI, A.**, 2004. *Agricultural markets and the rural poor: Draft background paper for workshop of the Poverty Eradication Network (POVNET), March 5, 2004*. [Online]. Washington: IFPRI. Available: http://dfid-agriculture-consultation.nri.org/themes4/keypapers/povnet_agricultural_markets_and_the_rural_poor.pdf [Accessed 20 August 2012].

OWEN, D.L. and **VAN DER ZEL, D.W.**, 2000. Trees, forests and plantations in South Africa. In: *South African Forestry Handbook*, vol 1. The South African Institute of Forestry.

PEDERSEN, C.A., 2008. *Overview of the Danish agricultural advisory system*. Presentation to EURAGRI, Foulum, Denmark, 19 September. http://euragri.org/fileadmin/www.euragri.org/Carl_Aage_Pedersen.pdf [accessed 25 August, 2012]

PETHERAM, R.J., 1998. *Review of Evaluation in Agricultural Extension*. Publication No 98/136. Project No VCA-3A. Barton, Rural Industries Research and Development.

PEDROSA, B.M.J. and **SILVEIRA, P.C.B.** nd. *Small-scale fisheries governance in Brazil*.

http://funda.academia.edu/PedroSilveira/Papers/1368248/SMALL-SCALE_FISHERIES_GOVERNANCE_IN_BRAZIL [accessed 19 August, 2012]

PHILLIPS, M., **COLLIS, W.**, **DEMAINE, H.**, **FLORES-NAVA, A.**, **GAUTIER, D.**, **HOUGH, C.**, **LUU, L.T.**, **MERICAN, Z.**, **PADIYAR, P.A.**, **PALMER, R.**, **PANT, J.**, **PICKERING, T.**, **SECRETAN, P.** and **UMESH, N.R.**, 2012. Servicing the aquaculture sector: role of state and private sectors. In Subasinghe, R.P., Arthur, J.R., Bartley, D.M., De Silva, S.S., Halwart, M., Hishamunda, N., Mohan, C.V. and Sorgeloos, P. (eds.): *Farming the waters for people and food*. Proceedings of the Global Conference on Aquaculture 2010, Phuket, Thailand, 22-25 September 2010. Rome and Bangkok: FAO and NACA. http://www.worldfishcenter.org/resource_centre/WF_3151.pdf [accessed 18 August, 2012.]

PLANTATIONS FOR AUSTRALIA, nd. *Farm forestry in Denmark: no government extension service, (almost) no forestry subsidies. infocus: the newsletter of Plantations for Australia*.

<http://www.plantations2020.com.au/infocus/acrobat/august05/denmark2005.pdf> [accessed 25 August, 2012]

PONTE, S., 2008. Greener than thou: The Political Economy of Fish Ecolabeling and its Local Manifestations in South Africa. *World Development* 36(1): 159-175

REPUBLIC OF THE PHILIPPINES, nd. *Fisheries extension officers training manual*. Quezon City: Department of Natural Resources, Republic of the Philippines.

<http://www.fao.org/docrep/field/003/AC061E/AC061E00.htm#TOC2> [accessed 9 August, 2012].

- REPUBLIC OF SOUTH AFRICA (RSA), 1935. Sea Shore Act (No. 21 of 1935). *Government Gazette, South Africa* 34781 (of 25-November-2011, Volume 557, 31).
- RUDEBJER, P, KASOLO, W, and KAWAPATA, M, 1997. *Agro-forestry education and extension links in Malawi and Uganda: A pilot study of extension workers' experiences* [Online]. International Centre for Research in Agro-forestry. Available: <http://www.worldagroforestry.org/sea/Publications/files/report/RP0083-04.PDF> [Accessed 15 August 2012].
- RUGEJE, S, 2004. Land Reform in South Africa: An Overview. *International Journal of Legal Information*. 283 (2004): 1-28 Online publication <http://ccs.ukzn.ac.za/files/LandreforminSouthAfrica.pdf>. Accessed July 2012
- ROBERTS, K.C, COUTS, J, AYERS, F.J, and BILSTON, L, 2002. Co-learning in the Development of Lotus Pasture Technology in Australia. *Australian Journal of Experimental Agriculture*, 42, pp. 527-533.
- RÖLING, N, and ENGEL, P.G.H, 1991. The Development of the Concept of Agricultural Knowledge Information Systems: Implications for Extension. In: Rivera, W.M. and Gustafson, D.J. (Eds), *Agricultural Extension: Worldwide Institutional Evolution and Forces for Change*. Amsterdam: Elsevier Science, pp. 125-138.
- RÖLING, N, 1995. What to Think of Extension? A Comparison of Three Models of Extension Practice. *AERDD Bulletin* (Francophone issue), December.
- ROSA, H, nd. *Small-scale fisheries in Brazil*. http://procs.gcfi.org/pdf/gcfi_30-17.pdf [accessed 19 August, 2012]
- RSA, 1973. Sea Birds and Seals Protection Act (Act No. 46 of 1973). *Government Gazette, South Africa* 30575.
- RSA, 1974. Nature and Environmental Conservation Ordinance, (Ordinance 19 of 1974).
- RSA, 1994. Maritime Zones Act (No. 15 of 1994). *Government Gazette, South Africa* 1952.
- RSA, 1996. Constitution of the Republic of South Africa, Act 108 of 1996.
- RSA, 1998. Marine Living Resources Act (Act No. 18 of 1998). *Government Gazette, South Africa* 18930.
- RSA, 2004. NEMA: National Protected Areas Amendment Act (Act No. 24 of 2004). *Government Gazette, South Africa* 27274
- RSA, 2004. NEMA: Biodiversity Act (Act No. 10 of 2004). *Government Gazette, South Africa* 26436.
- RSA, 2008. National Environmental Management (NEMA): Integrated Coastal management Act (Act No. 24 of 2008). *Government Gazette, South Africa* 31884.
- SAIGAL, S, ARORA, H, and RIZVI, S.S, 2002. *The new foresters: The role of private enterprise in the Indian forestry sector* [Online]. New Delhi, London: Eco-tech Services and the International Institute for Environment and Development (IIED).
- SALOMON, M.J, 2011. PhD Thesis. University of KwaZulu-Natal
- SAXENA, N.C, 1999. *Forest policy in India* [Online]. WWF - India and IIED. Available: <http://pubs.iied.org/pdfs/7554IIED.pdf?> [Accessed 15 August 2012].
- SAXENA, N.C, 2005. Bridging research and policy in India. *Journal of International Development*, 17, 737-746.
- SCHUH, G.E, 2000. Why Rural Human Development Matters. Extension Education: Reshaping African Universities and Colleges for the 21st Century. Workshop Proceedings, 4 -6 September, Ghana.
- SCOONES, I, and THOMPSON, J, (Eds), 1994. *Beyond Farmer First*. London: ITDG Publishing
- Surplus People's Project (2009) *Agricultural Policy and Rural Poverty in South Africa: A Survey of the Past 20 Years: Executive Summary*. SPP. Athlone, South Africa

- SEN, S, and NIELSEN J.R, 1996. Fisheries Co-management: a comparative analysis. *Marine Policy*, Vol. 20, No. 5, pp. 405-418
- SEYDACK, A.H.W, and VERMEULEN, W.J, 2004. Timber harvesting from southern Cape forests: the quest for sustainable levels of resource use. In: Lawes, M., Eeley, H., Shackleton, C and Geach, B. (Eds) *The Use and Socio-Economic Value of Indigenous Forest and Woodland Resources in South Africa*. University of Natal.
- SHACKLETON, C.M, and SHACKLETON, S.E, nd. Use of woodland resources for direct household provisioning. In: Lawes, M., Eeley, H., Shackleton, C and Geach, B. (Eds) *The Use and Socio-Economic Value of Indigenous Forest and Woodland Resources in South Africa*. University of Natal.
- SHANLEY, P, and MEDINA, G, 2006. Connecting through culture: communication strategies to enhance forest research and extension in the Brazilian Amazon. In Pantanella, E. and Pisanelli, A. (eds.): *Communication strategies for multiple partner involvement in forestry extension* pp 31-44. Vienna: IUFRO. http://www.ibaf.cnr.it/proceedings_IUFRO%20january%202006.pdf [accessed 19 August, 2012]
- SHARMA, R, 2003. Effective networking of research and extension through information technology. In Sharma, R. (ed.): *Integration of agricultural research and extension. Report of the APO study meeting on integration of agricultural research and extension. Philippines, 18-22 March 2002* pp 78-103. Tokyo: Asian Productivity Organisation. <http://www.apo-tokyo.org/publications/files/agr-08-iare.pdf> [accessed 18 August 2012]
- SHONE, A.K, 1985. Forestry in Transkei. Published by the Department of Agriculture and Forestry, Republic of Transkei in cooperation with the Forestry Branch of the Department of Environmental Affairs and the Department of Foreign Affairs, Republic of South Africa.
- SHIPTON, T, and BRITZ, P.J, 2007. A study on the Status of Aquaculture Production and Trade in South Africa. Volume 1: Industry Status and Diagnostic Report. A report for the Department of Trade and Industry produced by Enviro-Fish Africa (Pty.) Ltd. 90p.
- SHIVA, V, 1993. *The Violence of the Green Revolution: Third World Agriculture, Ecology and Politics*, London, Zed Books.
- SKOVDRYKERNE, 2012. <http://www.skovdyrkerne.dk/omskovdyrkerne/english/> [accessed 25 August, 2012]
- SONGORE, N, 1998. Fisheries extension in small water body fisheries in Zimbabwe. In Petr, T. (ed.): *Inland fishery enhancements*. Rome: FAO Fisheries Technical Paper 374.
- SPIELMAN, D.J, KELEMWORK, D, and ALEMU, D, 2011. Seed, fertiliser and agricultural extension in Ethiopia. Addis Ababa and Washington, D.C.: IFPRI *Ethiopia Strategy Support Programme II Working Paper 20*. <http://www.ifpri.org/sites/default/files/publications/esspwp20.pdf> [accessed 25 August, 2012]
- SUBRAMANIAN, V, and CHAND, R, n.d. *National extension system in India* [Online]. ICAR. Available: www.moaf.gov.bt/moaff/?wpfb_dj=439 [Accessed 15 July 2012].
- SWANSON, B.E, nd. *Overview of the Worldwide Extension Study: Progress Report* [Online]. Available: [www.rimisp.org/.../File/.../8.%20WWES_Burt%20Swanson.pdf-Chile](http://rimisp.org/.../File/.../8.%20WWES_Burt%20Swanson.pdf-Chile) [Accessed 20 August 2012].
- SWANSON, B.E, BENTZ, R.P, and SOFRANKO, A.J, (Eds), 1997. *Improving Agricultural Extension: A Reference Manual*. Rome: FAO.
- SWANSON, B.E, 2010. Changing extension paradigms within a rapidly changing global economy. *Rural Development News* 1: 59-63.
- SWANSON, B.E, and RAJALAHTI, R, 2010. Strengthening agricultural extension and advisory systems: procedures for assessing, transforming, and evaluating extension systems. Washington, DC: The World Bank *Agriculture and Rural Development Discussion Paper 45*.
- TEBA DEVELOPMENT, 2010. *Integrated small enterprise development strategy for the forest sector in South Africa*. Report prepared for the Department of Agriculture, Forestry and Fisheries. DAFF, 2010.
- TERBLANCHÉ, SE, 2006. The need for a new generation of farmers and agriculturists in South Africa and the role of agricultural extension. *South African Journal of Agricultural Extension* Vol. 35 (2) 2006: pp. 132-157

- TCHALE, H, SIMTOWE, F, and CHULU, O, 2000. *Agricultural policy reforms in Malawi* [Online]. Bunda College of Agriculture and IFPRI. Available: http://www.zef.de/module/register/media/e3da_simtowe%20policy%20background%20papersbundapp1.pdf [Accessed 20 August 2012].
- THOMPSON, J, and SCOONES, I, 2009. Addressing the dynamics of agri-food systems: an emerging agenda for social science research. *Environmental Science & Policy*, 12, 386-397.
- UNASYLVA, 1984. Extension and the changing role of forestry. Editorial. Rome: FAO: *Unasylya* 143. <http://www.fao.org/docrep/q5240e/q5240e01.htm#editorial%20%20%20extension%20and%20the%20changing%20role%20of%20forestry> [accessed 9 August, 2012]
- USAID SPARE FISHERIES AND AQUACULTURE PANEL, nd. *Review of the status, trends and issues in global fisheries and aquaculture, with recommendations for USAID investments*. http://pdacrsp.oregonstate.edu/miscellaneous/F%26A_Subsector_Final_Rpt.pdf [accessed 18 August 2012]
- VAN'T LAND, G, STEFFENSEN, J, and NAITORE, H, 2007. Local level service delivery, decentralisation and governance: A comparative study of Uganda, Kenya and Tanzania Education, Health and Agriculture sectors. Dege Consult for JICA.
- VAN SITTERT, L, 2003 The tyranny of the past: Why local histories matter in the South African fisheries. *Ocean and Coastal Management* 46(1-2):199-219.
- VAN ROOYEN, J, 1995. Overview of DBSA's farmer support programme: 1987-1993. In R. Singini and J. van Rooyen (Eds.), *Serving small-scale farmers: An evaluation of the DBSA's farmer support programmes*. Halfway House Development Bank of South Africa.
- VAN ZYL, J, 1993. *Agriculture and Rural Development*. Monograph. University of Pretoria Online publication [http://repository.up.ac.za/bitstream/handle/2263/2997/VanZyl_Agriculture\(1993\).pdf](http://repository.up.ac.za/bitstream/handle/2263/2997/VanZyl_Agriculture(1993).pdf). Access July 2012
- VAN ZYL, J, VINK, N, KIRSTEN, J, and DANESWAN, P, 2000. South African Agriculture in Transition: The 1990s. Working paper 2000-06. Department of Agricultural Economics, Extension and Rural Development, University of Pretoria, Pretoria.
- VERMEULEN, S, WOODHILL, J, PROCTOR, F, and DELNOYE, R, 2008. *Chain-Wide Learning for Inclusive Agrifood Market Development: A guide to multi-stakeholder processes for linking small-scale producers to modern markets*. London: International Institute for Environment and Development & Wageningen: Wageningen University and Research Centre.
- VINK, N and SCHIRMER, S, 2002. South African agriculture in the period 1970 - 2000. In Jones, Stuart, *The South African economy in decline, 1970-2000*, Cheltenham, Edward Elgar
- VINK, N, and KIRSTEN, J, 2003. Agriculture in the national economy', in L. Niewoudt and J. Groenwald (eds.), *The Challenge of Change: Agriculture, land and South African economy*. Scottsville: University of Natal Press.
- VORLEY, B, 2002. *Sustaining agriculture: Policy, governance and the future of family based farming*. [Online]. London: International Institute for Environment and Development. Available: <http://pubs.iied.org/pdfs/9175IIED.pdf> [Accessed 20 August 2012].
- WILLIAMS, A.T, and Dickson, B.J, 1996. *Towards a National Social Forestry Policy and Programme*. Biomass Initiative Report PFL- SYN-03. Department of Mineral and Energy Affairs.
- WÄCHTER, F, 2008. An Investigation of the South African Land Reform Process, from a conflict resolution perspective. Thesis: Magister Philosophiae_Conflict Transformation And Management. Nelson Mandela Metropolitan University
- WINBERG, E, 2010. *Participatory forest management in Ethiopia, practices and experiences*. Addis Ababa: FAO. <http://www.fao.org/forestry/24514-043adbe564e803444b40d3e18987b434d.pdf> [accessed 25 August, 2012]

- WOLFORD, W, 2012. O Brasil gigante: *bringing the Brazilian miracle to African soil*. Ithaca; Institute for the Social Sciences, Cornell University: Contesting Global Landscapes theme project.
http://www.socialsciences.cornell.edu/1215/Wolford_Research.pdf [accessed 19 August, 2012]
- WOLUCHEM, M, 2012. *New Approaches to the Green Revolution: Successes, Failures and New Rice for Africa* [Online]. Independent Study Project (ISP) Collection. Paper 1307. Available: http://digitalcollections.sit.edu/cgi/viewcontent.cgi?article=2315&context=isp_collection [Accessed 20 August 2012].
- WORLD BANK, 2008. *Project appraisal document on a proposed grant in the amount of US\$20 million and proposed grant from the Global Environment Facility Trust Fund in the amount of US\$9 million to the Federal Democratic Republic of Ethiopia for a sustainable land management project*. Washington, D.C.: The World Bank.
http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2008/04/10/000334955_20080410050936/Rendered/PDF/429270PAD0P10710and0IDAR20081007211.pdf [accessed 25 August, 2012]
- WORLD FISH CENTRE, 2008. *Fisheries policies, support services and the institutional environment for trade*. Penang: World Fish Centre *Issues Brief 1868*.
http://www.worldfishcenter.org/resource_centre/WF_1049.pdf [accessed 23 August, 2012]
- WORLD FISH CENTRE, 2012. *Waste not want not. Spreading affordable integrated agriculture-aquaculture in Malawi, sub-Saharan Africa*. <http://www.worldfishcenter.org/outcome/success-stories/waste-not-want-not> [accessed 18 August, 2012]
- WORLD FOOD PROGRAMME, 2012. *Malawi* [Online]. Available: <http://www.wfp.org/countries/Malawi/Overview> [Accessed 15 August 2012].
- WORTH, S.H, 1994. *The Management of Agricultural Development in Bophuthatswana*. Master's Thesis. University of Natal. Pietermaritzburg
- WORTH, S.H, 2006. Agriflection: a learning model for agricultural extension in South Africa. *The Journal of Agricultural Education and Extension*. 12 (3) pp. 173-193.
- WORTH, S.H, 2009. *An assessment of the appropriateness of agricultural extension education in South Africa*. Doctoral Thesis. University of KwaZulu-Natal.
- YAMANE, M, 2001. China's recent forest-related policies: overview and background – from the perspective of economic growth and forest conservation. *Policy Trend Report 2001*: 1-12.
http://enviroscope.iges.or.jp/modules/envirolib/upload/370/attach/complete_report.pdf [accessed 23 August, 2012]
- ZHANG, X, and KEMPENAAR, C, 2009. *Agricultural extension system in China*. Wageningen: Plant Research International BV.
- ZHIWEN, S, 1997. *A review of aquaculture extension services in the People's Republic of China*. Bangkok: FAO Regional Office for Asia and the Pacific. <http://www.fao.org/docrep/005/AC804E/ac804e00.htm#Contents> [accessed 23 August, 2012].

National Policy on Extension and Advisory Services



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