

# POLICY BRIEF

IMPACTS OF TRAINING ON FARMERS AND EXTENSION AGENTS IN BHUTAN: IMPROVING FARMING SYSTEMS, INCOMES, AND RESILIENCE

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# **POLICY MESSAGE**

## **CONTEXT:**

There are around 65,000 farming households in Bhutan. Improving the skills and knowledge of farmers, to ensure that they apply effective farming practices, is a challenging task. Communities, where most livelihoods are based upon agriculture, are often in remote locations. Many villages are inaccessible during the monsoon period, and over the winter, when snow is a major impediment. Extension Agents (EA) often have to walk several hours or days to provide extension services.

According to the *Study on the Impact of Farmer Training in Bhutan* (EU-TACS, 2021), over the past eight years 52% of farmers had never attended an agriculture training course, and 67% of livestock owners had received no training. Likewise, 69% of farmers had not received training in forestry. 56% of farmers have never attended an exposure visit, nor visited an ARDC. Among farmers interviewed, 28% had rarely/never been trained by extension agents. The main problems preventing farmers from improving their knowledge through learning events and training are:

- 45% of farmers are illiterate. They prefer practical, learning-by-doing approaches. Only 16% of those interviewed for the EU-TACs Training Study had either a bachelor's degree, or higher secondary education. Many farmers are unwilling to travel outside their local area for training, especially during critical periods in the farming calendar.
  - Government agencies and other institutions supplying training to farmers, are constrained by a shortage of staff specializing in farmer training, and they are also affected by limited budgets. These organizations are particularly characterized by their limited capabilities in providing multiplier training in relevant renewable natural resources (RNR) topics.
  - Studies have shown that, in many Gewogs, each Extension Agent has to support far too many farming households. This characteristic of Government extension systems is quantified in terms of the *"ratio of farming household populations per EA"*. According to a 2020 DoA study, across Bhutan, a single Extension Agent is on average responsible for 238 farming households.

Assessments have shown that farmers require methods such as:

- (1) person-centered learning;
- (2) on-farm demonstrations;
- (3) farmer-managed research;
- (4) E-learning and ICT-based approaches; virtual/remote training courses;
- (5) Farmer field schools;
- (6) Training of trainers that builds the skills of Lead Farmers (LF); and
- (6) short-term classroom-based training. An appropriate blend of these methods, that directly builds the capacities of farmers, can increase the reach of each individual Extension Agent.

# DRIVERS OF CHANGE FOR CAPACITY-BUILDING OF FARMERS AND EXTENSION AGENTS

### **LEARNING METHODS FOR FARMERS:**

During the *Study on the Impacts of Farmer Training in Bhutan*, farmers indicated that the primary sources of information about improved farm resources management were: self-learning (81% of farmers); farmer-to-farmer learning (73%); learning from extension agents (55%); government-sponsored training courses (39%); learning via farmer producer groups (30%); visits to Agricultural Rural Development Centres (24%); and exposure visits (22%).

#### Figure 1: Adult Learning Principles

**Principle 1.** Learners need **clear goals for the skills and knowledge** they wish to acquire.

<u>**Principle 2.</u>** Participants strongly prefer training relevant to their livelihoods, especially where mentors give continued orientation.</u>

**Principle 3.** Learners want to **learn at their own pace;** teaching is most effective when the content is taught to learners who are fully engaged in the learning process, mainly via **practical skills training.** Adult learners can be motivated by **Prize Schemes.** 

**<u>Principle 4.</u>** Adult learners benefit from **sharing their recent learning experiences** with other farmers. **Customary practices** must be respected, reviewed, and updated.

<u>Principle 5.</u> On-the-job and classroom-based learning can be aided by **ICT-based knowledge**, for those farmers who are literate.

A fundamental weakness of government-sponsored training courses, which was noted by 45% of farmers, was the lack of follow-up mentoring by experts. The farmers emphatically requested that EAs or other experts should visit them on their farms.

Despite these weaknesses, more than 75% of farmers believed that their training courses had improved the quality of their farming. These improvements had led to greater farm productivity, and increased household incomes deriving from crops and livestock. Regarding Technical and Vocational Education Training (TVET), most farmers thought this kind of training was primarily relevant only to job seekers, unemployed young people, and farm laborers.

#### **KEY LEARNING TOPICS FOR FARMERS:**

During the study, farmers were asked if they had attended formal training courses over 2013-2021 in any of the three **critical renewable natural resource sectors, comprising agriculture, livestock and forestry.** 52% of farmers had received no training in agriculture topics, 67% had received no training in livestock management, and 69% had received no training in agroforestry and community forestry. Only 25% of farmers had received training in cross-sectoral subjects, such as leadership, book-keeping, business management, and farmer group formation. Only 14% of farmers benefited from TVET subjects, including carpentry, masonry, handicrafts, and farm waste management.

The farmers were asked to identify the topics they found most useful for day-to-day farming. Regarding **agricultural cropping systems**, 76% of farmers considered crop production practices the most useful. This was followed by pest and disease management (70%); diversification into new crops and varieties, and using new technologies (45-52%); soil and water management (51%); and post-harvest management (39%).

For **livestock systems**, 84% of farmers considered managing feed and fodder to be the most helpful topic. This was followed by livestock pest and disease control (77%); dairy production (56%); biogas installation and maintenance (42%); artificial insemination (34%); poultry management (26%); pig management (20%); and fish pond installation and control (12%).

Figure 2: New Technologies Relating to Adaptation to Climate Change and Environmental Management – practical learning for construction, operation and maintenance

- 1. Energy-efficient farmhouses.
- 2. Irrigation systems, including channel-fed; pipe-fed; sprinkler; and drip systems.
- 3. Poly-tunnels for horticulture crops.
- 4. Greenhouses for horticulture crops.
- 5. Electric fencing, both solar and mainspowered.
- 6. Battery-powered farm machinery.
- 7. Shelter for farm animals, that is both heatand cold-resistant.
- 8. Biogas digestion units, both on- and offfarm.
- 9. Cooking, heating and lighting powered by installations producing biogas from farm yard manure.
- 10. Organic composting units (on-farm/off-farm).
- 11. Cold storage units (on-farm and off-farm).
- 12. Pest-hardy crop storage units (on & off-farm).
- 13. Recycling units for processing farm waste (e.g., rice mill waste, cereal straw, paper, plastics, etc.)



#### **KEY ROLES OF EXTENSION AGENTS:**

Extension agents usually possess a university or college degree in a relevant subject area, such as agriculture, livestock, or forestry. Some EAs have expertise in a combination of all three RNR subject areas. The role of the EAs is to widen the application of helpful knowledge, via their extension work with farmers. Most of the skills required for EAs as established in Dzongkhag Guidelines, are oriented towards farm production, as shown in the following list mandating their roles:

## Figure 3: Key Roles of extension agents under Dzongkhag Administration

Dzongkhags and Gewogs are responsible for providing critical services to farmers. According to the 12th FYP, the GNHC assigns the following <u>technical-support</u> <u>roles to extension agents</u>, operating through administrative institutions, at both Dzongkhag and Gewog levels:

- Role 1. Capacity-building of farmers & user groups.
- Role 2. Market sheds, and sales counters.
- Role 3. Farm shops and cold-storage facilities.
- Role 4. Rainwater harvesting structures.
- Role 5. Soil and land management.
- Role 6. Irrigation channels and delivery systems.
- Role 7. Supply of seeds and seedlings.
- Role 8. Arable, horticultural & livestock production.

- <u>Role 9</u>. Organic farming & nature-based agriculture.
- Role 10. Vegetable and fruit systems & production.
- Role 11. Manure, fertilizer, pesticide, herbicide supplies.
- Role 12. Farm mechanization: machinery supplies, technologies, tools.
- Role 13. Livestock breeding support and supply of veterinary drugs, vaccines and equipment.
- Role 14. Veterinary hospital and ambulance.
- Role 15. Development of fodder resources.
- Role 16. Milk processing units.
- Role 17. Agricultural product marketing, including value-added products & off-season vegetables.
- Role 18. Human-wildlife conflict management, via mains-powered and solar-powered electric fencing.

Studies have demonstrated the need for EAs to further develop their skills in critical topics, such as: (1) Methods for assessing the needs of farmers for skills development; (2) Methods for effective mentoring of farmers; (3) Approaches for promoting farmer innovation; and (4) How to disseminate, out-scale and promote the adoption of new practices and technologies. In addition, the EAs must become aware of emerging policy areas and themes, that affect service delivery to farmers. Amongst many others, these include subjects such as (1) Climate change adaptation; (2) Waste recycling; (3) Ecosystem and spring-shed management; (4) Improving equity in gender roles, and between social classes; (5) Advantages of commercial and contract-based farming.

#### LEARNING METHODS FOR EXTENSION AGENTS:

Extension Agents require capacity building to improve service delivery in the topics listed in the previous section. A training needs assessment (TNA) is necessary for all Dzongkhags and Gewogs. This TNA should follow the steps recommended by the Royal Civil Service Commission, as shown on the next page.

According to the 2021 study by EU-TACS, 108 EAs from 18 Dzongkhags responded to an online survey of EAs. The age range was balanced across all strata. Women made up 23% of respondents, with 48% women operating in the agriculture sector, and 15% in the livestock sector. The most frequent form of learning for EAs was on-the-job field experience and exposure, with 90% undergoing training of this kind at least once a year. 32% of online



### **TRAINING INSTITUTIONS:**

Many organizations are involved in formal training in Bhutan's RNR sector. These include the three major accredited training institutes:

- Rural Development Training Centre (RDTC/MoAF Secretariat) at Zhemgang;
- (2) the College of Natural Resources (CNR/Royal University) at Lobesa;
- (3) Ugyen Wangchuck Institute for Conservation and Environment (UWICER in Bumthang), under the Department for Forest & Park Services.

Ad-hoc training is provided across Bhutan by:

- (1) Agricultural Research and Development Centres (ARDCs);
- (2) Regional Livestock Development Centres (RLDCs); and
- (3) Various Dzongkhag offices.

To give one example, the RDTC training plan for 2021-22 has delivered ten training courses for 429 people, who were mainly job seekers and youth. The focal areas ranged from livestock management, to book-keeping for forestry groups, to poly-tunnels for vegetable production, and also addressed flori culture.

Training is also provided from time to time through MoAF's Central Technical Departments; donor-assisted projects; private-sector training institutes; and INGOs, NGOs and CSOs. For example, ICIMOD and SAARC provide learning facilities and events to underprivileged communities in South Asia through their *Consortium of Open and Distance Learning*.

respondents had attended formal training courses, while 18% had attended workshops and conferences at least once a year. Only 6% had participated in international study tours, and 4% had participated in training courses abroad. Study tours and training outside Bhutan are considered a privilege by EAs.

The COVID-19 pandemic has changed the modes of training available to EAs. Virtual and remote training opportunities and gratis E-learning courses have become more accessible. 18% of EAs have attended a virtual training event at least once, and 20% have undertaken E-courses. But despite the improved accessibility of online training, 38% of EAs have still not participated in virtual training, and 51% have not experienced any E-course learning.



A significant problem is the absence in Bhutan of an *Integrated Farmer and Extension Agent Learning Program* (IFEAP) and a harmonized *Monitoring, Evaluation, Research and Learning* (MERLU) system. These instruments are now urgently required to provide a substantial volume of high-quality training directed at lead farmers, farmer groups, and Extension Agents. This lack of a national systems approach is addressed below.

Led by MoAF, an IFEAP-MERLU system would:

- (1) Establish and build-up a *partnership of complementary institutions*;
- (2) Enable effective collaboration between participant institutions;
- (3) Support the *sharing of training best practices*, to improve the effectiveness of farmer capacity-building; and
- (4) Avoid the *duplication* of training.

A vital element in an integrated training program would be that MoAF would develop a *partnership* of all significant institutions in Bhutan that provide farmer training. MoAF would determine how to further develop *bilateral and multilateral collaboration*, involving all stakeholders, aimed at improving the volume and quality of farming capacity-building across all the farming Districts of Bhutan.

MoAF would lead discussions among institutional stakeholders regarding the critical problems hindering farmer capacity-building, to *identify direct solutions* to address these concerns.

The proposed *farmers' learning program* would be designed to deliver a sustained set of courses, that build one upon another, for learning participants within each targeted geographical region. This would prevent the common problem whereby training events are only delivered on a one-off basis, with no follow-up in applying a consistent *skills-development curriculum* aimed at farmers' needs.

Finally, the system would **organize and allocate funding to finance farmer-to-farmer events and networks.** These would aim to generate a significant volume of skills training, based on the **training-of-trainers model.** This initiative would seek to substantially expand the scale of skills training available for farmers, thereby significantly increasing the capabilities of targeted Lead Farmers. After receiving training that meets their needs, the LFs would support the development of skills amongst their friends and neighbors who live in local communities.

Learning for EAs would be based upon a *national capacity-building system aimed directly at the needs of extension agents.* This system would be capable of tackling the emerging policies and themes that MoAF seeks to implement, covering topics on various scales, such as spring-shed management, crop field production, commercial value-chains, the resilience of farmer livelihoods, and increasing community food security.

# POLICY IMPLICATIONS AND SECTOR REFORM

## STRUCTURAL CHANGE:

In the sections above, we have listed some of the requirements and needs pertaining to an *Integrated Farmer and Extension Agent Learning Program* (IFEAP) and a coherent *Monitoring, Evaluation, Research and Learning System* (MERLU). Given the significant unmet demand of farmers and EAs for improved support to build their capacities, there will be a need for **more funding** and an **increase in MoAF staffing** to make it possible to develop and implement the proposed IFEAP delivery program.

The IFEAP will require different institutes and agencies to collaborate to construct an array of **complementary training policies and agreements.** This will streamline the involvement of each stakeholder participant institution's involvement. The following complementary strategies, programs, and action plans are proposed:

- Implementation of a coordinated Integrated Farmer and Extension Agent Learning Program for Bhutan involving all formal and non-formal training institutes and agencies. This Program would develop a series of **Farming Training Curricula** for all relevant RNR topics, detailing the skills that farmers require, and proposing effective methods for building these. This could be established under the Secretariat at MoAF.
- Establishment of an Association for Professional RNR Trainers in Bhutan to address the shortage of high-quality trainers in Bhutan. The association would provide a service for **membership and certification of professional RNR trainers**, implement a search facility for trainers, accept requests for training events, support a mentor ship facility for farmers and extension, and operate an interactive website. This could be established through a local NGO.
- Establishment of *Knowledge Partnership involving Research Institutes and Training Institutes* to share best practices in the key RNR sectors. These could be established via a **funded coordination mechanism** for RDTC, CNR, and UWICER training institutes, and for various MoAF research facilities, including the Information and Communication Technology Division (ICTD).
- Provide significant financial and technical support tailored towards the improvement of training infrastructure and facilities at all RDTCs, CNR and UWICER, and ARDCs and facilities at the Dzongkhag level. This facility would be based on a *comprehensive* learning program needs assessment of existing facilities, focusing on the RNR training methods and technologies that each facility is capable of applying, for both classroom-based and remotelearning.



- The Needs Assessment would also determine the quality and volume of the **physical equipment**, such as computers, projectors, sound systems, and pilot demonstration areas, that are available for each facility. This needs assessment would **identify how training methods are updated to apply E-RNR technologies and** utilize modern equipment and software (e.g., mobile phone apps, plus other ICT tools, such as webinars). The assessment would also review how far each training facility applies the principles of **green waste management** and clean-energy technologies.
- MoAF, with partners, should establish a *Monitoring, Evaluation, Research and Learning* (MERL) system that will maintain an agreed set of indicators. **Participant institutions would supply information to MoAF twice per year** to enable sufficient monitoring of efforts by member institutions, but without imposing excessive demands for information on the participants in the overall IFEALP. This data would prove invaluable to MoAF's planners and related Ministries and Departments, as well as to the Gross National Happiness Commission.

### **VISIONS, MANDATES, AND ROLES:**

Visions, mandates and roles will need to be developed for a range of stakeholders involved in adult learning targeted at farmers, lead farmers, and extension agents. Some of the critical themes and areas that need support and revision are:

Restructuring and *shifting the emphasis of the types of knowledge addressed by Bhutan's farming training programs.* First of all, the topics addressed by participant institutions must **fully meet the needs of farmers for skills that improve their crop, agroforestry, and livestock management.** Building upon this basis, training components should be implemented that increase the <u>EAs' and farmers' understanding of emerging policies from central and local governments</u> that include:

<u>Theme 1.</u> Integrated value chains. This skills area would deal with the main crops and commodities that Bhutanese farmers produce, and would provide training in how farmers can adapt to the available inputs and services, and meet each value chain's evolving demands for farm products. The value chain emphasis must demonstrate to farmers *how to better position themselves within Bhutan's main commodity markets*. This can be achieved by farmers if they take part in production aimed at specific market windows (e.g., via new agro-processing facilities), that can maximize their prospects of earning a robust income.

<u>Theme 2.</u> Emerging market opportunities for farmers to supply emerging agro-processing businesses with commercial-scale volumes of agricultural products from farms, using out-grower organization models that provide farmers with reasonable purchase prices for their crop production, as well as implementation of cost-effective solutions to improve soil fertility.

<u>Theme 3.</u> Climate change adaptation and climate-smart technologies including hydroponics; rainwater harvesting; poly-tunnels and greenhouses; solar/mains electric fencing; solar cookers and biogas systems; mushroom production; smart irrigation systems (including sprinkler and drip systems); vermiculture and other waste composting methods; and cold-storage technologies.

<u>Theme 4.</u> MoAF's renewed focus on **Agricultural Extensification** that seeks to bring **fallow land** back into agricultural production, primarily by establishing **Entrepreneurial Agroforestry Systems**; community-level irrigation (especially using hydro-ram water-pumps); managed forest regeneration; improved utilization of farm machinery; and the active management of soil fertility.

<u>Theme 5.</u> Increased scale of ICT-based **decentralized information and communication technologies** that agencies involved in Bhutan's agricultural extension system use to reach right down to the grassroots level, and which deliver relevant messages to farmers. These messages and other ICT outreach should be managed, so that ICT-based messaging is consistent with face-to-face communication between farmers and EAs. This will include community-based message delivery systems that address the **resilience of farmers' livelihoods**, and of rural communities, in the face of natural hazards, and the increased risk of disasters due to the changing climate.

Theme 6. Substantial further professional development of extension agents, as defined in RCSC and Dzongkhag guidelines on the main topics and subject areas in which EAs should have substantial applied knowledge and practical skills. The list of the skills expected to be supplied by EAs, should be updated by MoAF in relation to emerging thematic areas and MoAF policy developments.

<u>Theme 7.</u> Investing more in **practical field-based training through promoting and piloting new RNR technologies** that are labor-saving, climate-smart, and that use clean energy sources. The set of promoted technologies should be consistent with the findings of participatory Needs Assessments, that have investigated the main gaps between the knowledge and skills that farmers actually had at the time they were assessed, compared with the range of skills that they will require to better manage their farms, in a resilient and commercially-oriented manner.

Theme 8. Inclusion of RNR Technical and Vocational Education Training in crucial government and private training institutes to support job seekers, unemployed youth and to enhance farm laborers' skills.

# POLICIES, STRATEGIES, AND PROGRAMMING:

Based on the findings from the *Study on the Impact of Farmer Training in Bhutan* (EU-TACS, 2021), <u>four key strategies</u> are proposed:

<u>Strategy 1.</u> Enhancement of the **adult self-learning capacity off arming households** by introducing gender-sensitive E-learning technologies; and by utilizing on-farm learning techniques, such as field demonstrations of good agricultural practices, demonstrations of new technology, and farmer-managed research trials.

**Strategy 2.** Building of a **training and mentoring program for Lead Farmers,** spearheaded by Extension Agents and rural researchers, who are engaged at field level. The development of *farmer-to-farmer extension systems will rely on Lead Farmers graduating to become community-level RNR trainers.* Lead Farmers will provide further multiplier training to neighbors within farming communities, using training-of-trainer (ToT) principles and practices.

**Strategy 3.** Establishment of a **Technical and Vocational Education Training support program** for government and private training institutes. This would target job seekers, unemployed rural youth, farm laborers, and members of farming households seeking off-farm income sources. TVET would go beyond the traditional masonry, carpentry and handicraft-making activities, and enter new thematic areas. These would now include topics such as building hydroponic units, installing climate-smart water management irrigation systems, installing electric fencing, and community or farm-level irrigated poly-tunnels and greenhouses.

<u>Strategy 4.</u> Capacity development of government and private institutions and agencies involved in RNR training, that will enable them to develop diversified training curricula, that extend beyond traditional production-oriented training. This would take account of new policy areas and emerging thematic subjects, such as food and nutrition for self-sufficiency; climate-smart technologies; agribusiness and commercial farming; commodity value-chain opportunities; fallow land conversion; farm mechanization (including clean energy/battery-operated machines); and entrepreneurial agroforestry.

Other **areas for capacity-building** would support the establishment and strengthening of **Departments for E-Learning and Virtual Training;** the supply of modern equipment and software for RNR Learning Management Systems; online E-Training course platforms for lead farmers and extension agents; training delivery systems, using mobile phones; and the preparation of video-based learning content.

## LEARNING METHODS, PROCESSES, PROCEDURES, AND GUIDELINES:

Innovative Adult Learning Methods (IALM) will focus on relevant knowledge content and improved field-based knowledge delivery systems, E-learning technologies, and participatory self-learning techniques. Methods to be considered include the following:

Development of **Open Online Training Courses** (free-at-source, E-Learning platforms) for Extension Agents to use with young farmers to build their skills in key thematic areas of RNR.

Creation of **Technological Networking Platforms** to connect RNR professionals for sharing knowledge regarding both on-farm research and agricultural extension, using platforms such as Webex, Zoom, Microsoft Teams, and other purpose-built platforms.

Development of an **Integrated Digital Extension Delivery System** throughout Bhutan to disseminate best practices, lessons learned, and case studies to EAs, Lead Farmers, farmers' groups and cooperatives using Gewog and Chiwog communication hubs. These would outscale the use of *E-RNR technologies*, such as mobile phone-based crop advisory management applications, Ag-Extension TV program series, and ICTD aimed at farmers (see E-RNR Master

Plan 2016 for complementary concepts).



Intensive promotion of **Improved Traditional and Innovative Knowledge Delivery and Sharing Systems**, including on-farm demonstrations; farmer day-schools; farmer-managed on-farm research trials; out-scaled school agriculture, agroforestry, and permaculture programs; trainand-visit (T&V) extension approaches; and learning-by-making methods.

Carrying out a *study to evaluate and upgrade training curriculum* at key training institutes to change the focus from the current production orientation towards a commodity value-chain orientation that includes farm mechanization, the promotion of climate-smart technology, and measures to increased resilience to natural disasters.

Development of an *up-to-date series of RNR extension guidelines, Packages of Practices, and manuals* that focus on the needs of extension agents and farmers in all RNR sub-sectors such as agriculture, livestock, entrepreneurial agroforestry systems, and community forestry.

Encouragement and finance of teams of professional trainers to develop off-the-shelf, cartoon-strip-based *RNR training materials and knowledge dissemination products* for extension agents and lead farmers to use with farmers' groups and women's groups.

#### HUMAN RESOURCES AND TRAINING:

Addressing the topics mentioned and implementing the projects listed above will necessitate the recruitment of additional key staff in a wide range of disciplines at both central and local levels. A training plan for human resources gap analysis and training needs assessment will be required.

MoAF should prepare an **Integrated Human Resources Training Plan** directed at trainers and RNR extension agents, and also farmers, herders, and farm foresters. The plan would examine the needs of the target groups; develop relevant training content; determine the most practical knowledge delivery methods, with a focus on E-learning and self-learning, in order to out-scale the reach of direct face-to-face training.

#### **MONITORING AND EVALUATION:**

Monitoring and evaluating the farmer and extension agent training program is currently a weakness in MoAF's five-year plans. There are no integrated annual reports on farmer and EA training, due to the disaggregated nature of the sources of training delivery.

MoAF, with other participant institutions, should establish a Monitoring, Evaluation, Research and Learning Unit (MERLU) under MoAF's Secretariat in order to develop and monitor training programs and plans across all sectors, as part of the proposed Integrated Farmer and Extension Agent Learning Program. This Unit will prepare bi-annual integrated training reports for the Ministry, and will identify RNR best practices and lessons learned.

The MERLU Unit will also prepare targeted **Training Concept Notes** for all emerging RNR policies, based on the needs identified. These concept notes would specify the relevant agencies involved, and the funding required. They would facilitate the evaluation of training programs across all departments at MoAF, and provide targeted support to all the agencies involved in the Integrated Farmer and Extension Agent Learning Program.

#### **COORDINATION, COLLABORATION, AND LINKAGES:**

Coordination, collaboration and linkages must be developed by the Policy and Planning Division (PPD) to support the proposed Integrated Farmer and Extension Agent Learning Program, under the MoAF Secretariat.

### **Policy Briefs**

Policy Briefs highlight development issues in Bhutan's renewable natural resources sector. The Policy Briefs provide information on governance, livelihoods, natural resources, and sustainability in an accessible way for decision-makers and donors.

Many of the Policy Briefs are based on evidence-based statistics available at the Ministry of Agriculture and Forests together with Research Studies carried out by the Policy and Planning Division at MoAF, and are often a synthesis of study reports prepared by international experts on behalf of donor agencies assisting the MoAF in Bhutan.



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