GOMBE STATE OF NIGERIA



FRAMEWORK FOR RESPONSIBLE AND INCLUSIVE LAND INTENSIVE AGRICULTURE (FRILIA)

OUT-GROWER AND FOOD SECURITY TOOLKIT

AUGUST, 2025

Issued according to Executive Order No. 13, Establishment, Adoption and Implementation of FRAMEWORK FOR RESPONSIBLE AND INCLUSIVE LAND INTENSIVE AGRICULTURE issued on December 18th, 2023.

Contents

Acronyms and Abbreviations	4
1. INTRODUCTION	5
1.1 Out-grower Schemes	5
1.2 Elements of Successful Out-grower Schemes	5
2. OBJECTIVES OF OUT-GROWER SCHEMES	6
2.1 Key Features of Out-grower Schemes	7
3. APPLICABLE FRILIA PRINCIPLES	8
3.1 Roles and Responsibilities of Key Stakeholders	8
3.2 Optimizing Out-grower Scheme Benefits	9
3.3 Out-grower Organisation Models	9
3.4 Model 1: Individual Farmers	9
3.4.1 Model 2: Cooperative	9
3.4.2 Model 3: Farmer's Corporate Entity	9
3.5 Investor Out-grower Models	10
4. OUT-GROWERS SELECTION AND MANAGEMENT	10
4.1.1 Selection criteria for out-growers	10
4.1.2 Assessing Farmer Capacity and Resources	11
4.1.3 Farmers' Commitment and Reliability	11
4.2 Engaging Stakeholders	11
4.3 Pre-Selection Interviews and Field Assessments	11
4.4 Registration of Out-growers and Management Information	12
4.4.1 Basic Personal Data Capturing	12
4.4.2 Farmers' Performance Monitoring Data	12
4.5 Input Supply and Loan Recovery	12
4.6 Extension Services and Field Monitoring	13
4.7 Marketing Arrangements	14
4.8. Pricing Mechanisms and Payment Modalities	14
4.9 Group Development Facilitation	15
5. OUT-GROWERS SCHEME PROCESS	15
6. CONTRACTS OR PRODUCTION AGREEMENTS	18
6.1 The out-grower contract should cover at least the following key issues:	18
7. FOOD SECURITY	18
7.1 Food Security Objectives	19

	7.2 Challenges to Achieving Food Security	19
	7.3 Strategies to Improve Food Security	20
	7.4 Out-growers scheme relationship with Food Security	20
8	EXTENSION SERVICES AND FIELD MONITORING	23
	8.1 Technical Training and Extension Services	23
	8.2 Community Engagement and Social Responsibility	24
9	. TEMPLATES	24
	OUT-GROWER TEMPLATE 1: AGREEMENT TEMPLATE	24
	OUT-GROWER TEMPLATE 2: MONITORING AND REPORTING TEMPLATE	26
	OUT-GROWER TEMPLATE 3: TRAINING AND EXTENSION SERVICES TEMPLATE	27
	OUT-GROWER TEMPLATE 4: PAYMENT AND DELIVERY LOG TEMPLATE	28
	OUT-GROWER TEMPLATE 5: ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA) TEMPLATE	28
	OUT-GROWER TEMPLATE 6: ANNUAL REVIEW AND EVALUATION TEMPLATE	29
	OUT-GROWER TEMPLATE 7: OUT-GROWERS REGISTRATION FORM/MANAGEMENT INFORMATION	30
	OUT-GROWER TEMPLATE 8: INDIVIDUAL FARMER'S PERFORMANCE MONITORING TEMPLA	

Acronyms and Abbreviations

CFS RAI – Committee on World Food Security on Responsible Investment in Agriculture

ESIA- Environmental and Social Impact Assessment

FPIC – Free, Prior and Informed Consent

FRILIA - Framework for Responsible and Inclusive Land Intensive Agriculture

GMoU - Global Memorandum of Understanding

GRM - Grievance Redress Mechanism

NGOs - Non-governmental organizations

OG - Out-grower

VGGT - Voluntary Guidelines on the Responsible Governance of Tenure

1. INTRODUCTION

The Out-grower and Food Security Toolkit is aimed at encouraging and supporting large-scale agribusiness investments to engage smallholder farmers to participate as out-growers in the investment. It is intended to support both the investor and the out-growers and their communities. It also includes a focus on the potential impact of out-grower schemes on household food security and nutrition.

In this arrangement, the investor provides essential support to smallholder farmers, who agree to produce specific crops that meet certain standards, typically for supply to the agribusiness. The main goal is to promote sustainable agriculture and inclusive economic growth by integrating small-scale farmers into larger, more structured supply chains.

More specifically, this toolkit guides investors and out-growers on how to:

- Ensure compliance with all applicable FRILIA principles.
- Structure the investor-out-grower relationship so it enables parties to sustainably contract with each other, and others in their value chain.
- Ensure the investor's quality and production requirements are met.
- Ensure that the out-growers are properly compensated for their produce and are
 - o continuously upskilled by learning and extension
 - o improving productivity by adopting modern techniques and equipment
 - o reducing impact on climate and environment
 - o continuously growing income.

As such the toolkit and supporting templates include recommendations for organizing, contracting and operating a modern value chain in agriculture.

1.1 Out-grower Schemes

Broadly defined, out-grower schemes are contractual agreements between small scale farmers and buyers of farm products in which:

- Farmers agree to supply a buyer (sometimes called an "off-taker") with agricultural produce that meets stated requirements of quantity, quality, timing and price. The off-taker agrees to buy the produce, often at a prior agreed price. Usually, the off-taker also provides some incentives such as pre-finance; seeds and fertilisers and other inputs; creditworthy contracts with the farmers; and knowledge of modern business farming.
- Investors can obtain more produce without the need for acquiring more land, and without using additional capital.
- Outgrowing ensures involvement of local farmers, introduces modern farming techniques, contributes significantly to economic upliftment and social harmony of the surrounding communities.
- Outgrowing keeps land and other natural resources in the hands of the community.

1.2 Elements of Successful Out-grower Schemes

For investors, the elements of a successful out-grower scheme are well-recognized:

 Build strong relationships with out-growers based on trust and communication by engaging in initial and ongoing consultations so out-growers understand the company's business development plan. Conduct an ongoing dialogue. (See Stakeholder Engagement Toolkit.)

- Utilize and abide by fair contracts with out-growers and ensure all parties clearly understand their roles and responsibilities.
- Negotiate and abide by fair and transparent pricing and quality assessment mechanisms and ensure out-growers understand and agree with them. Prices should be subject to change based on market conditions and ideally contain a price floor to ensure financial viability for the out-growers.
- Provide technical support to out-growers along with high quality inputs at reasonable cost to ensure improved quality, output and incomes. In some cases, provide access to finance.
- Consider implementing programs to improve participation of women, youth and marginalized groups in the out-grower program.
- Avoid negative impacts on the environment.
- Establish and utilize in a participatory manner fair and accessible monitoring and grievance redress mechanisms. (See GRM Toolkit.)

Key Requirements for Successful Out-grower Schemes

- Careful pre-investment evaluations of the business plan, sustainability, and benefits for participating farmers and communities
- Early-stage community consultation, particularly with respect to community impacts and access to land
- Written and signed contracts, with effective monitoring and grievance procedures
- Efforts at multiple levels to improve the productivity and quality achieved by smallholders
- Processes for managing risk in responding to changing circumstances
- Support for community engagement and capacity to engage

2. OBJECTIVES OF OUT-GROWER SCHEMES

Out-grower arrangements have gained prominence due to their potential to create mutually beneficial relationships between agribusiness investors and affected communities, especially smallholder farmers. But not all such schemes result in this "win-win" outcome.

The objectives of an out-grower scheme typically focus on fostering sustainable agricultural practices, empowering smallholder farmers, and securing reliable, quality supplies for agribusinesses. Here are some key objectives:

- **a. To Secure Supply Chain for Agribusinesses:** Ensure a reliable, high-quality supply of agricultural produce for the agribusiness, reducing dependency on external markets and ensuring consistency.
- **b. To Enhance Productivity and Quality Assurance:** Improve the yield and quality of crops produced by smallholder farmers through the provision of inputs, technical support, and training.
- **c. To Create Economic Empowerment for Smallholder Farmers**: Provide smallholder farmers with access to inputs, credit, and stable markets, helping to improve their incomes and livelihoods.
- **d. To provide Market Access for Farmers:** Guarantee market access for smallholder farmers, reducing the risks associated with fluctuating market prices and helping them secure fair prices for their crops.

- **e. To promote Sustainable Agricultural Practices:** Encourage the adoption of environmentally friendly and sustainable farming practices, including soil management, pest control, climate-smart techniques, and efficient resource use.
- **f. To ensure Rural Development and Poverty Alleviation:** Drive rural development by creating jobs, increasing income stability, and improving access to infrastructure and services in farming communities.
- **g. To Mitigate Risks in the agricultural Value Chain:** Distribute risks between the agribusiness and farmers, with agribusinesses supporting farmers to withstand market fluctuations, crop failures, and other production challenges.
- **h. To Build Long-Term Partnerships:** Establish mutually beneficial, long-term relationships between agribusinesses and farmers, fostering trust, collaboration, and resilience in the agricultural sector.
- **i. To Enhance Food Security:** Contribute to national and regional food security by boosting agricultural output, stabilizing supplies, and making food products more accessible and affordable.
- **j. To encourage Social Responsibility and Community Engagement:** Strengthen the social license of agribusinesses by supporting local economies, respecting land rights, and actively engaging with communities and other stakeholders.

These objectives align agribusiness goals with those of smallholder farmers, promoting a model that is economically viable, socially inclusive, and environmentally responsible.

2.1 Key Features of Out-grower Schemes

- 1. **Input Support**: Agribusinesses often supply farmers with inputs like seeds, fertilizers, pesticides, and sometimes financial assistance. This helps to improve crop quality and productivity.
- 2. **Technical Training and Extension Services:** Farmers receive training on best farming practices, pest and disease control, and post-harvest management. This support ensures consistent and high-quality output that meets market demands.
- 3. **Guaranteed Market Access**: One of the most attractive features of out-grower schemes is the assurance of a market. Farmers have a pre-arranged buyer (the agribusiness) for their produce, which reduces the risks of fluctuating market prices and helps stabilize farmers' income.
- 4. **Income Stability and Rural Development:** By integrating smallholders into structured agricultural supply chains, out-grower schemes help boost rural economies, improve income stability for farmers, and increase food security at the local level.
- 5. **Shared Risks and Costs:** Both the farmers and the agribusinesses share the risks and costs involved in the production process, which encourages joint responsibility for yield and quality outcomes.

3. APPLICABLE FRILIA PRINCIPLES

The following FRILIA principles relate to food security and out-grower arrangements:

- Investments should be consistent with and contribute to policy objectives, including poverty eradication, food security, sustainable land use, employment creation, and support to local communities (FRILIA principle 1.1)
- Investments should occur transparently (FRILIA principle 1.2)
- Land acquisition and related adverse impacts will as much as possible be minimised or avoided (FRILIA principle 1.3)
- Range of investment and production models should be considered including alternatives to large scale transfer of land (FRILIA principle 1.4)
- Investments should be subject to consultation and participation, including the disadvantaged and vulnerable, informed of their rights and assisted in their capacity to negotiate (FRILIA principle 1.5)
- Communities have the opportunity and responsibility to decide whether or not to make land available, based on informed choices (FRILIA principle 1.6)
- Investments should be monitored (FRILIA principle 1.7)
- Investments should safeguard against dispossession of legitimate tenure rights (FRILIA principle 2.1)
- Safeguard against environmental damage unless adequately mitigated (FRILIA principle 4.1)
- Investments preceded by independent assessments of potential positive and negative impacts on tenure rights, food security, livelihoods, and environment (FRILIA principle 4.2)

The FRILIA principles apply to all stakeholders acting in the agri-investment environment, including all stakeholders involved in out-grower arrangements.

3.1 Roles and Responsibilities of Key Stakeholders

<u>a. Investor/Buyer</u>: The investor is the lead partner and off-taker who is the:

- Proponent of the investment
- Lead researcher and analyst
- Provider of credit and inputs and technical expertise
- Contracting partner and purchaser

<u>b. Out-grower</u>: The out-grower is a contracting partner and supplier who:

- Provides local knowledge
- Farms and delivers product that meets agreed standards

<u>c. Gombe State Government</u>: The Gombe State Geographical Information Services is the enabler and regulator that:

- Makes policy and in some cases provides incentives
- Monitors to ensure compliance with FRILIA principles and other applicable laws and policies.

3.2 Optimizing Out-grower Scheme Benefits

Governments can also take steps to maximize the likelihood that an out-grower scheme will benefit both the investor, the out-growers and their communities:

- Where an investor includes an out-grower component in a proposed investment that is subject to screening by the government, the responsible agency should assess the agricultural experience, financial capacity and technical expertise of the investor with regard to working with out-growers and local communities more broadly. In Gombe state, this screening activity would occur in Stage 4 of the state's Investment Approval Process.
- In some cases, it may be appropriate to include the out-grower agreement in the overall investment agreement between the investor and the government in order to firmly establish the investor's obligation to include out-growers in the project. (See GMoU Toolkit Template 8).
- The Ministry of Agriculture can help to develop the capacity of out-growers and the broader community to engage with investors. This should include encouraging farmers' associations and other civil society organizations to provide support.
- Develop and implement strategies to help women, youth and marginalized groups to participate in out-grower schemes.
- Ensure that environmental and social impact laws and international standards are followed so as to avoid negative impacts on local communities and their environment. This activity would occur in Stage 5 of the state's Investment Approval Process
- Regularly monitor investors and out-grower schemes against agreed metrics and support the establishment and operation of fair grievance redress mechanisms.

3.3 Out-grower Organisation Models

There are three basic organisation models for out-growers as described briefly in this section.

3.4 Model 1: Individual Farmers

Individuals, and often their families, farm small pieces of land using traditional methods. The supply contract is between the investor and the farmer. Experience shows that these contracts are often difficult to enforce because it is unseemly for an investor to pursue a smallholder farmer through the courts for a relatively small amount of money. Significant problems arise for credit providers when thousands of small debts are not paid.

3.4.1 Model 2: Cooperative

Individual farmers are members of a cooperative. Farming is undertaken individually on small pieces of land using improved traditional methods. The cooperative arranges for technical support and supply of modern fertilizers and improved seeds, usually on credit¹ from the investor. The supply contract is between the cooperative and the investor.

3.4.2 Model 3: Farmer's Corporate Entity

Here, individual farmers exchange land use rights for a share in their own, properly registered and incorporated, company. The share entitles each shareholder to a dividend, and an opportunity for

¹ Either the Investor supplies inputs or provides credit to the cooperative or gives a guarantee to the cooperative lenders.

wage employment. The corporation is a modern business with an organization structure, business management and farm operations to match.

3.5 Investor Out-grower Models

Three common business models for investors in out-grower schemes in Gombe State are described in Table 1.

Table 1-Investor Out-grower Models

Investor Model 1: Aggregate, Process, Market Collects from individual small holders, transport, and aggregates. Processes, packs and ships, sells to Market.	Suited to OG Model 1: Individual Farmers	Rice, Maize, Cassava; Fresh Vegetables, Small Dairies, Poultry eggs and Broilers, Aquaculture
Investor Model 2: Process, Market Investor buys produce already aggregated by the Outgrowers either through their own organization or a cooperative. The Investor processes, packs and ships, and sells to market.	Suited to OG Models 2 & 3: Cooperatives and Farmers Corporate	Rice, Maize, Cassava; Fresh Vegetables, Small Dairies, Poultry for eggs and Broilers, Aquaculture Oil Palm, Cashew, Cacao
Investor Model 3: Final Process & Market Produce is processed by the Outgrowers and sold to an investor who finishes the process, packs	3: Cooperatives and	Medium Dairies, Poultry for day old chicks, eggs and Broilers, Aquaculture Oil Palm, Cashew, Cacao

4. OUT-GROWERS SELECTION AND MANAGEMENT

The selection of farmers in an out-grower scheme is a critical step that ensures the right participants are chosen for a successful partnership. This process typically involves evaluating farmers' capacity, resources, and commitment to meeting the scheme's requirements. Developing selection criteria in relation to production standards will assist in assessing what level of support is required to facilitate further development.

4.1.1 Selection criteria for out-growers

and sells to final market.

- Farm Size and Land Suitability: Farmers should have access to land with appropriate soil and climatic conditions for the crops in the scheme. Land size requirements may vary depending on the target production volume.
- **Experience and Skill Level:** Preference should be given to farmers with experience in growing similar crops, as this reduces the learning curve and enhances productivity.

• Access to Water and Infrastructure: Ensuring that farmers have adequate water sources and basic infrastructure (e.g., storage, transport access) helps improve crop quality and reduces logistical challenges.

4.1.2 Assessing Farmer Capacity and Resources

- Availability of Labor: Farmers should have enough family or hired labor to manage their plots effectively and meet production targets.
- **Financial Capability:** Although some schemes provide inputs on credit, it's essential to assess whether farmers have basic financial stability to cover incidental costs or repay input credits if required.
- Willingness to invest in new Practices: Farmers open to adopting improved practices, such as new seeds or cultivation methods, are often more successful in out-grower schemes.
- Agricultural Knowledge and Experience: Preference should be given to farmers with deep knowledge of farming and who have had experience in out-growers scheme operation.
- Basic Business-Awareness: Farmers to be selected should be able to keep simple records and should be able to fully understand contractual terms, including expectations, pricing, quality standards, and delivery obligations.

4.1.3 Farmers' Commitment and Reliability

- **History of Engagement:** Farmers with a proven track record in previous out-grower schemes or similar contractual arrangements may be more reliable and committed.
- Willingness to Adhere to Scheme Guidelines: Farmers must commit to quality standards, delivery schedules, and use of the inputs provided by the agribusiness.

4.2 Engaging Stakeholders

Stakeholder engagement begins early in the investment process and should continue for the entire life of the investment project. It is one of the essential elements of a responsible and successful investment in agriculture. The principles of free, prior and informed consent (FPIC) (as described above and pursuant to FRILIA principle 1.5) should be followed at all times. (Refer to Stakeholder Engagement Toolkit)

4.3 Pre-Selection Interviews and Field Assessments

By carefully selecting farmers based on these criteria and involving community leaders, investors can improve the scheme's efficiency, ensure high-quality production, and foster long-term partnerships. This approach helps ensure that selected farmers are well-prepared and positioned to succeed in the scheme, benefiting both the investors and the farmers themselves.

• **Field Visits:** Investors' representatives should conduct field assessments to evaluate the farm conditions, soil quality, and farmers' existing practices.

• Interviews and Screening: There should be Interviews or orientation sessions for intending out-growers. This provides an opportunity to assess farmers' understanding of the scheme and answer questions, ensuring clarity and alignment on expectations.

4.4 Registration of Out-growers and Management Information

To ensure good and transparent management practices it is imperative that clear, detailed information is recorded for individual farmers. These include:

- Basic Personal data of individual farmers
- Farmers' Performance Monitoring Data

4.4.1 Basic Personal Data Capturing

Personal details of the individual should be obtained including location, National Identification Number and others (see Template 7)

4.4.2 Farmers' Performance Monitoring Data

- Computer programmes should be designed to facilitate monitoring the performance of individual smallholder farmers, providing a basis for assessing the eligibility of farmers for higher or follow-up/next-step input packages through tracking their performances and general management decisions.
- Reporting formats to be used by individual farmers, farmer groups and/or field
 officers should be developed to capture the required data in a consistent manner
 and allow for easy use by the farmer and processing by the investor (see Template
 8).
- It is equally important that the activities of any field or Extension Officers are properly monitored from farmer mobilization and contracting to the efficient delivery of extension messages (see Template 3)

4.5 Input Supply and Loan Recovery

Input Provision

- **Seeds, Fertilizers, and Pesticides:** Investors may provide farmers with high-quality seeds, fertilizers, and pesticides to ensure consistent yield and quality.
- **Credit Facilities:** Some schemes provide inputs on credit, which farmers can repay after harvest, making participation more accessible.
- Management Information Systems: Investors should embrace digital information system
 for proper recording of all inputs supplied on credit against the producers' number, as well
 as deductions made against crop delivery. The same applies to every other activity and
 transactions with the out-growers.

• **Timeliness:** There should be timely delivery of inputs and other services, and these must be properly planned and to respond to farmers' needs, creating incentives for farmers to honour contracts.

The better and wider the range of services offered, the closer the relationship between farmers/out-growers and the investor, and the more the farmer will lose by breaking the relationship.

4.6 Extension Services and Field Monitoring

Technical Training and Extension Services

sustainable.

- **Training:** Farmers should be trained on best agricultural practices, crop management, pest control, and post-harvest handling to improve productivity and crop quality.
- **Extension Support:** Regular visits by extension officers help monitor crop progress, address issues, and support farmers with guidance.

There may be a need for investors to perform full training and extension needs analysis to establish a baseline to enable them to plan the implementation or expansion of extension services to their out-grower farmers, who should be involved in the process to ensure that their needs are being addressed where feasible.
The delivery of extension services should be properly planned to ensure timely delivery.
The number of extension officers required should be dictated by, among others, the geographical spread of the farmers or farmer groups, and the effective coverage a single extension officer can provide.
Extension Officers should monitor crop growth stages, input use, pest management, and overall progress which is essential in tracking the scheme's performance. Record keeping of yield, input usage, harvest, produce sales and quality data allow for better analysis, decision making and improvement over time.
Extension services are often a major expenditure in an out-grower scheme, and ultimately the cost of the extension services should be commensurate with the volumes and value of the commodity in question. The cost must be reasonable and

Community Engagement and Social Responsibility: This involves Community Integration and Social responsibility.

- **Community Integration:** Investors should engage and interact with the local community, including traditional leaders and local authorities. This builds trust and supports smooth operation.
- **Social Initiatives:** Investors should essentially invest in social projects as responsibility to local development.

4.7 Marketing Arrangements

Out-grower schemes usually involve hundreds or even thousands of small-holder farmers, therefore, a network of depots and buying centers should be set up to facilitate delivery of produce by farmers, either throughout the marketing period or at designated times. It is important that staff positioned at these depots are well trained in grading procedures, and closely monitored to ensure adherence to such grading procedures.

Quality Standards should be set to help ensure that the produce meets the investor's requirements.

Regular Inspection and Grading of produce should be made to verify quality and grade, with clear criteria for rejections, bonuses, or penalties.

Grading standards should be clear and transparent to the farmers. When possible, visual grading aids should be made available. Farmers should be well trained in grading of the produce.

When there is a differentiation in prices paid at the factory gate or at the depots/buying centres (farm-gate price), farmers should have a free choice in where to deliver their produce.

Bulk produce supply should be encouraged by the investor's payment of premium price for such bulk supply. This in addition encourages group formation processes.

Investors should coordinate harvesting and transportation from farms to central processing or storage locations in order to preserve quality during transit.

4.8. Pricing Mechanisms and Payment Modalities

- There should pre-agreed or market-based prices by investors and out-growers in order for farmers to have guaranteed market and predictable income.
- Pricing structures should be clearly defined to protect farmers from fluctuating market prices and ensure fair compensation.
- Payment to farmers should be as prompt as possible. This should be when the produce changes hands, but at least no later than the pre-planting agreed period after the transfer of produce has taken place.
- All transactions should be properly recorded, indicating grades, corresponding weights and prices, total value of the delivery, and any deductions for inputs or, if applicable, other services provided.

Price Mechanism in Out-growers Scheme

Pricing mechanisms in out-grower schemes are crucial as they directly impact the sustainability of the scheme, farmer livelihoods, and the investor's profitability. Effective pricing structures aim to balance fair compensation for farmers with the competitive needs of investors.

Types of pricing mechanism

- **Fixed Price Mechanism:** Under a fixed price mechanism, the agribusiness and the farmer agree on a predetermined price at the beginning of the season, regardless of market fluctuations.
- Market-Linked or Floating Price Mechanism: Prices are set based on prevailing market rates at the time of harvest or delivery, often referencing a local, national, or international market index.
- **Cost-Plus Pricing:** The price is calculated based on the actual cost of production (seeds, labor, inputs) plus a margin to ensure profitability for the farmer.

- Guaranteed Minimum Price with Market Adjustment: The agribusiness offers a guaranteed minimum price, ensuring that farmers earn at least a certain amount, even if market prices fall. If market prices are higher, farmers are compensated at the market rate.
- **Profit-Sharing Mechanism:** Agribusinesses and farmers agree on a profit-sharing model, where a portion of profits from the final product sales is shared with the farmers, sometimes based on yield or quality.
- Quality-Based Pricing: Prices are determined based on the quality of the produce, with higher-quality yields earning premium prices.
- **Input Deduction Model:** Agribusinesses provide inputs (seeds, fertilizers, pesticides) on credit and deduct the cost of inputs from the payment at harvest, sometimes with interest.
- **Hybrid Pricing Models:** A combination of mechanisms, such as guaranteed minimum price with quality-based bonuses, is used to ensure fair compensation while maintaining flexibility for both farmers and agribusinesses.

Each pricing mechanism offers different levels of income stability, market exposure, and incentives for quality, which impact the overall success and sustainability of an outgrower scheme. Selecting the right pricing model requires balancing market dynamics, farmer welfare, and the agribusiness's operational goals.

4.9 Group Development Facilitation

- It should be noted that in most cases Group or Association leaders, sometimes also referred to as farmer facilitators or lead/contact farmers, are the link with the investor.
- Group leaders must be approved by the investo, they must be literate and have a minimum of administrative skill.
- The Group leader must be accepted, approved and trusted by the farmers.
- Group leaders and members must be trained in group dynamics and development.
- Group size is often determined by the nature of the commodity.
- Larger groups are the norm for annual crops, but for perennial crops where longer-term partnerships are at the core of the relationship, with a relatively high level of investment by the supporting investor, smaller groups of 10-15 farmers are more effective.

5. OUT-GROWERS SCHEME PROCESS

The out-grower process typically involves several stages that ensure a structured and mutually beneficial relationship between agribusinesses and smallholder farmers. Here's an outline of the general process:

Figure 1: Out-growers Scheme Process Flow Chart



1. Planning and Feasibility Assessment

- **Define Objectives:** Establish the purpose of the out-grower scheme, whether to increase production, support smallholder farmers, or ensure consistent supply.
- **Identify Crops and Regions:** Select crops suited to the agribusiness needs and regions where these crops can thrive.
- **Stakeholder Engagement**: Involve relevant stakeholders, including government agencies, NGOs, local leaders, and financial institutions, to secure support and partnerships.
- **Feasibility Study**: Assess the economic, social, and environmental impact of the scheme, considering potential challenges like climate, land availability, and market demand.

2. Farmers Selection and Onboarding

- **Farmers Recruitment:** Identify eligible smallholder farmers based on set criteria, such as land size, experience, and location.
- **Screening and Selection:** Screen farmers for their willingness to participate, their capacity to meet quality standards, and their history with similar schemes (if any).
- **Agreement Formation**: Develop and sign an out-grower agreement detailing inputs provided, expected outputs, payment terms, and other responsibilities.

3. Input Provision and Training

- **Input Distribution:** Provide selected farmers with inputs such as seeds, fertilizers, and pesticides, either at subsidized rates or on credit.
- **Technical Training:** Conduct training sessions on sustainable farming practices, pest management, quality control, and post-harvest handling.

• **Extension Support**: Assign extension officers or agronomists to regularly visit farmers, monitor crop progress, and offer on-ground support.

4. Crop Monitoring and Support

- **Field Monitoring:** Regular field visits to assess crop growth, identify potential issues (pests, diseases), and track input usage.
- **Data Collection**: Record crop development stages, yields, and other data for performance analysis.
- **Feedback Mechanism:** Maintain open communication with farmers, allowing them to report challenges and receive prompt support from agribusiness representatives.

5. Harvesting and Quality Control

- **Harvest Scheduling:** Organize a harvesting plan to ensure crops are collected at optimal times for quality preservation.
- **Quality Assessment:** Inspect harvested crops against pre-set quality standards. Grade the produce and document any discrepancies or rejections.
- **Transport Arrangements:** Arrange transportation from farms to processing centres or storage facilities, maintaining quality during transit.

6. Payment and Profit Distribution

- **Payment Processing:** Based on the agreed terms, process payments to farmers, either at delivery or after quality verification.
- **Bonus and Penalties:** Implement any performance-based bonuses or deductions as outlined in the agreement.
- **Documentation:** Maintain detailed records of each transaction, including quantities delivered, payment amounts, and dates, for transparency.

7. Evaluation and Feedback

- **Annual Review:** Conduct a thorough review of the scheme's outcomes, including yields, financial performance, and areas for improvement.
- **Stakeholder Feedback:** Gather insights from farmers, extension officers, and other stakeholders to refine processes and address any recurring issues.
- **Plan Adjustments**: Based on evaluation findings, adjust the strategy, improve training, or amend agreements for future cycles.

8. Sustainability and Growth

- **Continuous Improvement:** Implement new technologies, improve training, and enhance input distribution based on lessons learned.
- **Scaling Up:** If successful, consider expanding the scheme to include more farmers, additional crops, or even new regions.

• Social and Environmental Responsibility: Continuously monitor the social and environmental impacts of the scheme and apply sustainable practices to maintain a positive impact on communities and ecosystems.

This structured process is essential to ensure that all parties benefit, fostering a stable and sustainable partnership between agribusinesses and smallholder farmers.

6. CONTRACTS OR PRODUCTION AGREEMENTS

The Investor and Out-grower agreement should be governed by a formal, legally enforceable contract. The terms of the contract should be fair to both parties.

- Formal contracts specify the terms of engagement, covering responsibilities, inputs, pricing, delivery schedules, and quality standards.
- Agreements establish expectations, outline obligations for both parties, and help minimize misunderstandings.
- Contracts or production agreements between investors and farmers should be transparent and comprehensive.
- Farmers should understand the contract or production agreement, and how these affect them. The contract or production agreement can be translated into the local language and be fully explained to the farmers to ensure that they understand and accept the terms of the contract.

6.1 The out-grower contract should cover at least the following key issues:

- Personal details of the farmer, including identification and registration number
- Description of the area contracted
- The term of the agreement
- Product bought by the Investor: Specifications of Quantity, Quality, Timing and Price
- Support offered by the Investor: Extension Service, Credit Supply, Machinery Loan
- Obligations of both Parties: Implementation of ESIA, Food Security, Repayment of Debts
- Non-performance and disputes: Remedies for non-performance; Arbitration or other method of dispute resolution (refer to GMoU Toolkit)

7. FOOD SECURITY

Food security refers to the condition in which all people always have physical, social, and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life. It's a multi-dimensional concept that encompasses four main pillars:

- Availability: Food must be available in sufficient quantities and on a consistent basis, whether through domestic production, imports, or reserves. It also depends on a stable supply, free from disruptions caused by conflicts, economic downturns, or environmental factors.
- 2. Access: Individuals must have sufficient resources and purchasing power to acquire appropriate foods for a nutritious diet. This includes physical access (proximity to food

- markets) and economic access (affordability).
- **3. Utilization:** Proper biological use of food, requiring a diet with adequate variety and nutrition, as well as proper food preparation, storage, and sanitary conditions.
- **4. Stability:** Stability implies that all pillars of food security—availability, access, and utilization—are consistently met over time. It addresses resilience against risks, such as economic or environmental shocks, that could disrupt food security.

7.1 Food Security Objectives

To achieve food security for all, international best practices suggest seeking to achieve the following four "SMART"² objectives:

Table 2:

Objective 1	Higher Productivity that leads to Higher Total Food Production	Indicators to measure success: +Baseline and Current Food Crop Total Production. +Baseline and Current Food Crop Productivity
Objective 2	More Economic Activity within the Community leads to decreased poverty levels and increased food expenditure	Indicators to Measure success: +Poverty levels among Vulnerable People +Baseline and Current Expenditure on Food Products +Female participation in economy
Objective 3	Increased Collaboration leads to more effective use of Human Resources	Indicators to Measure success: +Number of conflict reports and referrals to the Grievance System. +Number of new jobs available within the Community
Objective 4	Increased nutrition knowledge and gender equity in household decision making leads to increased food nutrition	Indicators to Measure success: +Level of Stunting among under 5s +Bodyweight mass index (BMI) +Female participation in household decision making

7.2 Challenges to Achieving Food Security

- 1. **Climate Change**: Extreme weather events, temperature changes, and shifting precipitation patterns and other natural disasters affect crop yields and food availability.
- 2. **Population Growth:** Rising populations increase the demand for food, putting pressure on land, water, and other resources and often leading to poor health, inadequate sanitation, lack of clean water, and insufficient knowledge about nutrition. This can impair food utilization and thus lead to malnutrition and poor health.
- 3. **Conflict and Displacement:** Wars and conflicts disrupt food production, distribution, and access, often leading to severe food insecurity in affected regions.

² SMART objectives are "Specific Measurable Achievable Realistic Time Bound."

- 4. **Economic Inequality:** Disparities in income and access to resources and poverty create unequal access to food especially in vulnerable or marginalized communities.
- 5. **Food Waste**: Significant amounts of food are lost or wasted in supply chains, reducing overall food availability and contributing to hunger and malnutrition.

7.3 Strategies to Improve Food Security

- 1. **Sustainable Agricultural Practices:** Enhancing productivity while preserving natural resources and reducing environmental impact.
- 2. **Strengthening Food Systems:** Improving infrastructure, storage facilities, and transport networks to reduce food loss and waste.
- 3. **Social Protection Programs:** Providing safety nets, such as cash transfers or food assistance, to support vulnerable populations.
- 4. **Climate Adaptation and Resilience**: Supporting farmers with climate-resilient seeds, water conservation techniques, and other adaptive practices.
- 5. **Improving Market Access:** Enhancing local and international trade opportunities to stabilize food prices and improve access.
- 6. **Educational Programs**: Raising awareness about nutrition, food preparation, and health to improve food utilization.

7.4 Out-growers scheme relationship with Food Security

Out-grower schemes have a significant relationship with food security, especially in regions where smallholder farmers make up a large portion of the agricultural workforce. Here's how out-grower schemes contribute to food security:

1. Increased Agricultural Production

• Out-grower schemes boost production by providing farmers with high-quality inputs, technical training, and ongoing support, resulting in higher yields. Increased production of staple or cash crops contributes to local and national food availability, a key pillar of food security.

2. Enhanced Access to Markets

 Out-grower schemes guarantee farmers a stable market for their produce, encouraging them to invest more in agriculture and expand production. This reliable market access reduces post-harvest losses and ensures that more food reaches consumers, enhancing food distribution and availability.

3. Improved Farmer Income and Livelihoods

• By providing a stable income source, out-grower schemes help farmers earn more consistent and higher income, which can be invested in improved food, healthcare, and education for their families. This economic stability enables households to purchase diverse and nutritious foods, supporting food access and dietary quality.

4. Introduction of Sustainable Farming Practices

Many out-grower schemes incorporate training on sustainable agricultural practices,
 such as soil conservation, water management, and integrated pest management.

These practices improve soil health and long-term agricultural productivity, contributing to a resilient food system that can withstand climate-related or other production shocks.

5. Support for Local and Rural Economies

 Out-grower schemes foster rural economic development by creating jobs, boosting local economies, and improving infrastructure such as transportation and storage. This localized economic boost increases overall food access within communities and enhances rural food security.

6. Diversification of Crop Production

 Out-grower schemes often promote the cultivation of a mix of staple and cash crops, diversifying production. Crop diversification can reduce dependency on a single food source, making communities less vulnerable to price shocks and supply disruptions, which strengthens resilience and food security.

7. Building Agricultural Resilience

 By providing training, support, and insurance options, out-grower schemes help smallholders develop skills and resilience that make them better equipped to handle challenges like climate change, pest outbreaks, and fluctuating markets. Resilient farmers contribute to a more stable food supply chain.

In these ways, out-grower schemes promote food security by increasing food availability, improving economic access to food, and supporting a sustainable and resilient agricultural system. Through these initiatives, out-grower schemes help secure not only short-term food needs but also long-term food system stability.

Out-grower schemes can positively impact food security by increasing production, supporting farmer incomes, and improving access to resources. However, these schemes can also have negative impacts if they prioritize cash crops over food crops, lead to environmental degradation, or create economic dependencies. To enhance their positive impact on food security, out-grower schemes should:

- Incorporate mechanisms that support food crop production alongside cash crops.
- Provide education on sustainable practices to preserve soil health and productivity.
- Promote income stability through fair pricing models and market diversification.
- Ensure inclusivity to empower marginalized farmers and gender equality.

Ultimately, well-designed out-grower schemes that consider both economic and environmental factors can significantly contribute to local and regional food security.

Food insecurity and poor nutrition are caused by reduced access to physical, economic and social resources. The impact of each is classified below (Table 3) in terms of positive and negative impacts:

Table 3:

	Impact Potential	Impact Potential
Physical	↓ Fewer Physical resources: Land reallocation to investors: less land for community agriculture means less food. Water re-allocated to investors: less water for community agriculture means less food.	 Higher productivity New knowledge and skills bring better farming. New improved seeds give greater yield potential. Higher level of mechanisation increases productivity Improved post-harvest processes and facilities can reduce losses
Economic	↓ Fewer Economic Resources: People engaged in investment activities means fewer people engaged in food production. Actual Income from wages less than envisaged means less money for food. Time lapse between starting and earning income means temporary food shortage.	 More Economic Activity More economic activity means profits and wages which means more money for food purchases. Move away from subsistence economy means better allocation and more efficient use of economic resources³.
Social	Increased Competition Investors become competitors over land. Conflicts arise, food production declines. Inflows of people from outside the community on the news of work, wages, money available, causes food shortages. Commercialisation of production usually transfers control over income and food resources from women to men who are less inclined to spend on food ⁴ .	↑ Effective Collaboration between Investor and Communities • The Investor becomes a partner in development: food productivity increases, knowledge around nutrition increases. • Better Community Organization enables more people working together leading to higher production and better distribution.

³ For example, savings kept "under the mattress" are used for investment in business.

⁴ Studies suggest that increases in income from out-grower systems were typically controlled by males, and so did not translate to increases in the percentage of income spent on food, which was typically purchased by women - https://www.landgovernance.org/themes/foodsecurity/

The text in **bold** indicates categories that must be included in the investors' strategy. The list of causes provides guidance to the investor which should be followed while engaging with the community.

Investors can avoid harm to food security and nutrition and even improve them by adopting the following practices:⁵

- <u>Do no harm</u>. Ensure that existing sources of food security are not compromised by the investment.
- <u>Include food security in community consultations and agreements</u>. This is an essential topic for negotiations with communities and farmers.
- <u>Consider impacts on nutrition</u>. An adequate supply of food is not enough; the food must be sufficiently nutritious.
- <u>Ensure out-grower schemes improve food security</u>. Design schemes that have fairly priced crop purchase agreements and provide training so out-growers can improve productivity.
- Be wary of diverting food crops to cash crops. If this occurs, ensure that the community has alternative land to grow food crops, or that out-grower income is sufficient to purchase sufficient amounts of healthy food.
- <u>ESIA</u>. Consider the food security impacts of the out-grower program as part of an environmental and social impact assessment.
- <u>Gender</u>. Consider the impacts of the investment on women. Increasing women's incomes through employment or participation in an out-grower scheme could improve food security but may also have negative impacts through women's double burden of work and household commitments.

Gombe State should consider utilizing the following practices in relation to out-grower schemes:

- <u>National/state food security strategy</u>. The state should have a coherent food security strategy that aligns with the national strategy. The plan should specify the types of investment and business models most needed, including out-grower schemes where appropriate, and reflect food production and distribution needs and networks.
- <u>Give food insecure areas special attention</u>. Promote well-organized and inclusive outgrower schemes in areas that are food insecure.
- Consider food security implications of proposed out-grower schemes. The Ministry of Agriculture should consider potential impacts on local food security at the fostage of the State's investment approval process (IAP) when assessing proposed investments in Gombe State. This includes ensuring that food security protections are contained in the out-grower contract.
- <u>Monitor food security impacts</u>. The Gombe State Investment should include actual impacts on food security in its investment monitoring activities.

8. EXTENSION SERVICES AND FIELD MONITORING

8.1 Technical Training and Extension Services

• **Training:** Farmers should be trained on best agricultural practices, crop management, pest control, and post-harvest handling to improve productivity and crop quality.

⁵ This list and the following list aimed at governments are derived from "UNCTAD; World Bank. 2018. Introduction to Responsible Agricultural Investment. Responsible Agricultural Investment (RAI) Knowledge Into Action Note, no. 22; World Bank, Washington, DC.

⁽https://openknowledge.worldbank.org/entities/publication/52b913a1-6ab7-589c-a929-f51116d0ac50).

ension Support: Regular visits by extension officers help monitor crop progress, ress issues, and support farmers with guidance.
There may be a need for investors to perform full training and extension needs analysis to establish a baseline to enable them to plan the implementation or expansion of extension services to their out-grower farmers, who should be involved in the process to ensure that their needs are being addressed where feasible.
The delivery of extension services should be properly planned to ensure timely delivery.
The number of extension officers required should be dictated by, among other things, the geographical spread of the farmers or farmer groups, and the effective coverage a single extension officer can provide.
Extension Officers should monitor crop growth stages, input use, pest management and overall progress which is essential in tracking the scheme's performance. Record keeping of yield, input usage, harvest, produce sales and quality data allow for better analysis, decision making and improvement over time.
Extension services are often a major expenditure in an out-grower scheme, and ultimately the cost of the extension services should be commensurate with the volumes and value of the commodity in question. The cost must be reasonable and sustainable.

8.2 Community Engagement and Social Responsibility

This involves Community Integration and Social responsibility.

- **Community Integration:** Investors should engage and interact with the local community, including traditional leaders and local authorities. This builds trust and supports smooth operation.
- **Social Initiatives:** Investors should essentially invest in social projects as part of their responsibility to local development.

9. TEMPLATES

Templates for out-grower schemes help to establish clear frameworks for agreements, monitoring, and implementation, ensuring all parties involved understand their roles, responsibilities, and expectations. Below are some key templates commonly used in out-grower schemes:

OUT-GROWER TEMPLATE 1: AGREEMENT TEMPLATE

This template outlines the contractual relationship between the investor and the farmers, covering expectations, terms, and obligations.

Agreement Form

Category	Party		Na	ame			Contact Details
Parties Investor							
Involved	Farmer(s)						
			I				
Scope of Agreement	Description		De	etails			
Agreement	Types of Crops						
	Quantity						
	Quality Standar	ds					
I	December 11 and		T			I	0
Input Provisions -	Description		Туре				Quantity
Form	Seeds Provided		[Specify ty	pe of se	eds]	[Spe	cify quantity]
	Fertilizers		[Specify	type	of	[Spe	cify quantity]
	Provided		fertilizer]				
	Pesticides		[Specify	type	of	[Spe	cify quantity]
	Provided		pesticide]				
	Financial		[Specify	type	of	[Spe	cify amount]
	Support		support]				
	Other Inputs		[Specify ty	pe of in	out]	[Spe	cify
	other inputs					quar	ntity/amount]
		Ite	m Descript	ion		Details	
Pricing and Pay	ment Terms	Pri	Pricing structure and			[e.g., Pricing formula,	
		conditions			payment schedule,		
				penalties/bonuses based on			
						yield an	d quality]
		Payment schedule			[e.g., Payment timeline,		
						instalme	ents, final payment]
		Pe	Penalties/Bonuses [e.g., Per		enalties for late		
						,	or bonuses for
						exceedi	ng quality targets]

Delivery Schedule	Timeframes for delivery	[e.g., Date of first delivery,
	of crops	frequency of deliveries]
	Consequences for delays	[e.g., Penalties for missed deadlines or failure to meet quality expectations]
Technical Assistance	Type of training or extension services provided	[e.g., Crop management training, on-site technical support]
	Support provided for crop management	[e.g., On-the-ground technical assistance, field visits]
Dispute Resolution	Mechanism for resolving conflicts	[e.g., GRM, Mediation, conflict resolution through local councils or legal support]
	Dispute resolution steps	[e.g., Steps to follow if a dispute arises, timeframe for resolution]
Termination Clause	Conditions for termination of the agreement	[e.g., Breach of contract, non-performance, mutual agreement]

OUT-GROWER TEMPLATE 2: MONITORING AND REPORTING TEMPLATE

This template is used to track crop growth, input use, yield, and challenges faced by farmers. It provides ongoing insight into the scheme's performance.

Monitoring and Reporting Form

Farmer Identification							
Farmer ID	Farmer ID						
Location							
Plot Size							
		Input Utiliza	tion				
Input Type	Input Type Quantity Received Quantity Used Date Used						
Seeds							
Fertilizers							
Pesticides							
Other Inputs							
	Crop Development Stages						
Stage	Date Observed Notes (e.g., pests, diseases)						

Planting			
Flowering			
Harvest			
		Yield Data	
Estimated Yie	Estimated Yield		
Actual Yield			
	Challenges and Recommendations		
Challenges Observed			
Recommended Actions			
Extension Officer Comments			
Comments			

OUT-GROWER TEMPLATE 3: TRAINING AND EXTENSION SERVICES TEMPLATE

A structured guide for recording training sessions and other extension services provided to farmers.

Training Session Report Form

Training Session Report Form					
	Training Schedule				
Date					
Time					
	Training Content				
Topics Covered					
Trai	ner/Extension Officer				
Name					
Contact Information					
F	armers Attendance				
Farmers Names	Farmer ID	Contact			
Outcome and Feedback					
Evaluation of Training Session					
Feedback from Farmers					

OUT-GROWER TEMPLATE 4: PAYMENT AND DELIVERY LOG TEMPLATE

This template helps in recording details of crop deliveries and payments to ensure transparency in the transaction process.

Delivery and Payment Record Form

	Delivery	Details	
Date of Delivery			
Quantity Delivered			
Quality Rating			
Payment Details			
Amount Paid			
Payment Method			
Date Payment Received			
Receipt Confirmation			
Farmer's Name			
Signature			
Date			
Penalty or Bonus Application			
Туре	Description	Amount	
Penalty (if applicable)			
Bonus (if applicable)			

OUT-GROWER TEMPLATE 5: ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA) TEMPLATE

This template is used to evaluate the scheme's social and environmental impacts, especially in cases where sustainability is a key focus.

Environmental and Social Impact Assessment Form

Environmental Impact Assessment			
Aspect	Assessment Details		
Soil Quality			
Water Usage			
Deforestation			
Biodiversity			
	Social Impact Assessment		
Aspect	Evaluation Details		
Local Employment			
Income Levels			
Community Well-			
being			
Mitigation Measures			
Adverse Effect		Mitigation Strategy	

Community Feedback		
Feedback Mechanism		
Summary of		
Concerns		
Actions Taken		

OUT-GROWER TEMPLATE 6: ANNUAL REVIEW AND EVALUATION TEMPLATE

An end-of-year assessment of the outgrower scheme's overall performance and areas for improvement.

Scheme Performance Review Form

Performance Against Targets			
Performance Metric	Target	Actual Variance	
Crop Yield (tons/ha)			
Farmer Participation			
(No.)			
Income per Farmer (₦)			
Training Sessions			
Delivered			
Financial Summary			
Item		Amount (料)	
Total Expenses			
Total Revenues			
Profitability			
	Cha	llenges and Lessons Learned	
Challenge		Lesson Learned	
Low Crop Yield		Adjust input distribution or improve training on techniques.	
High Side-Selling Rate		Strengthen market linkages and communication with farmers.	
		Improvement Plan	
Weakness Identified		Proposed Action	
Inconsistent Attendan Training	ce at	Introduce incentives or schedule sessions flexibly.	
Soil Degradation		Introduce soil conservation practices and crop rotation.	
Stakeholder Feedback			
Stakeholder Group Feedback Summary		Feedback Summary	
Farmers		More timely provision of input is needed.	
Extension Officers		Increase training resources for effective delivery.	
Other Stakeholders		Improved collaboration with local authorities is recommended.	

OUT-GROWER TEMPLATE 7: OUT-GROWERS REGISTRATION FORM/MANAGEMENT INFORMATION

Outgrower Registration Form

outgrower negistration for	***	
1. Personal Details		
First Name(s)		
Family Name		
Date of Birth / Age		
Gender (Male/Female)		
2. Identification Information		
National Identify Number (NIN)		
Other Unique Identification (if any)		
Date of Registration		
	3. Location Details	
Village		
Chief		
Zone		
District		
4. Support and Cultivation Details		
Credit Provided (e.g., Inputs, Tools, Extension Support, Financial Assistance)		
Area Under Cultivation (for		
Outgrower Crop)		
5. Contact Information		
Mobile Telephone Number		
· · · · · · · · · · · · · · · · · · ·		

Notes:

- Ensure all fields are completed accurately for effective record-keeping.
- Attach copies of identification where applicable.

The above management information could be linked to GIS aerial mapping systems in more developed out-grower schemes.

OUT-GROWER TEMPLATE 8: INDIVIDUAL FARMER'S PERFORMANCE MONITORING TEMPLATE

Outgrower Scheme Monitoring Form

outgrower serieme monitoring rotti	
1. Contract and Inputs	
Name of Farmer	
Farmer's ID	
Location	
Contracted Area	
Distribution of Inputs	

2.	Nursery and Land Preparation		
Nursery Management (if			
applicable)			
Land Preparation			
3.1	3. Planting and Crop Development		
Time of Planting /			
Transplanting (if			
applicable)			
Crop Emergence / Seedling			
Survival Rate (if applicable)			
Spacing and Plant/Tree			
Density			
Timely Weeding and			
Adherence to Agronomic			
Practices			
4. Risk Mitigation and Pest Control			
Establishment of Fire			
Breaks/Guards (if			
applicable)			
Implementation of Pest			
and Disease Control			
Practices			
	Crop Monitoring and Harvesting		
Crop Establishment /			
Status at Intervals			
Timely Harvesting and			
Techniques			
Post-Harvest Technology			
6. Production and Data Management			
Production Data			
Formulation of Group			
Constitution (By-laws)			
Group Record Keeping			

Reporting formats to be used by individual farmers, farmer groups and/or field officers should be developed to capture the required data in a consistent manner and allow for easy processing.