The Expanded Access to Services for Agricultural Enterprises (EASE) Project

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List of Acronyms

BSADP	Bauchi State Agricultural Development Programme
BNARDA	Benue State Agricultural and Rural Development Authority
CBO	Community-based Organizations
CEFE	Competency-based Economies through Formation of Enterprise
COWAN	Country Women Association of Nigeria
EASE	Expanded Access to Services for Agricultural Enterprises
FACHI	Family Health Care Foundation
MARKETS	Maximizing Agricultural Revenue and Key Enterprises in Targeted Sites
MOU	Memorandum of Understanding
MFI	Microfinance Institution
NAEC	Nigerian Agricultural Enterprise Curriculum
NGO	Non-governmental Organization
NSADP	Nasarawa State Agricultural Development programme
OCAG	Onhyeta Care Givers
PFD	Partners for Development
PRI	Program Related Investment
SADP	State Agricultural Development Program
TA	Technical Assistance
TOT	Training of Trainers
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
VC	Value Chains
WEI	Women Empowerment Initiative
WODASS	Women Development Association for Self-sustenance.
WIN	Women in Nigeria

Project Background

Partners for Development (PFD) won an award of $700,000 in December 2009 from the United States Agency for International Development (USAID) to implement a grassroots agricultural development program entitled: "Expanded Access to Services for Agricultural Enterprise" (EASE) Project in Bauchi, Benue and Nassarawa States of Nigeria. PFD worked with 15 indigenous partner organizations, some of which are also registered as microfinance institutions (MFI) to implement the EASE Project. The project provides loans, business skills training and targeted technical assistance to beneficiaries in the project target locations. In October 2011, with an 18-month extension and an additional $600,000 from USAID, PFD expanded the EASE project to Sokoto State in northwestern Nigeria.

The main objectives of the EASE Project, which concluded September 30, 2013, were:

1) Increase business management skills for 11,000 agricultural producers and processors through entrepreneurial training,
2) Strengthen local value chains through group coaching to 2,750 entrepreneurs and targeted technical assistance consultancies to 550 enterprises, and
3) Improve financial services to 11,000 borrowers through increasing credit funds of MFI and introducing electronic loan payment technology.

Specific activities to address the program objectives included: provision of business development services using the Nigeria Agricultural Enterprise Curriculum (NAEC) to deliver business/management skills training; coordinating with smallholder farmers and relevant stakeholders to strengthen selected value chains (including rice, maize, cowpea, onion, cassava, sorghum, groundnuts and millet) with targeted technical assistance to some entrepreneurs; and provision of microcredit to support smallholder agricultural and petty businesses. All of these activities were facilitated through indigenous partners including community-based organizations, microfinance institutions and government agencies for the following reasons:

a. Capacity building of local organizations: Since commencing activities in Nigeria in 2001, PFD has worked with over 25 community-based organizations to deliver quality development interventions in the communities where they work;

b. Sustainability of project: PFD believes that skills gained by local partners remain within the local environment and therefore ensure sustainability of project interventions, in addition to generating project ownership among local organizations and their staffs;

c. Economies of scale: Working with a number of partners enables a larger, more efficient scale-up of project interventions than working directly with the project beneficiaries.

EASE Implementing Partners by State

PFD implemented the EASE Project in four states of Nigeria – Bauchi, Benue, Nassarawa and Sokoto – working with the 15 indigenous partner organizations listed below.

S/No	State	EASE Partners
1.	Bauchi	• Gerewa Women Multipurpose Cooperative Society • Kowanaka Community Development Association • Rahama Women Development Program • Toro Salama Women Development Initiative • Women Development Association for Self-Sustenance (WODASS) • Women Empowerment Initiative of Nigeria (WEIN)
2.	Benue	• Methodist Women Foundation • Ohonyeta Care Givers (OCAG) • Women in Nigeria (WIN)
3.	Nassarawa	• Country Women Association of Nigeria (COWAN) • Family Health Care Initiative (FAHCI) • Project Agape
4.	Sokoto	• Center for Promotion of Maternal and Child Welfare (CPMCW) • Save the Child Initiative (STCI) • Women Support and Child Development Initiative (WOSCDI)

Other partners that collaborated with PFD in the implementation of EASE Project include:

a) The Ministry of Agriculture
b) International Fund for Agricultural Development (IFAD)
c) The Agricultural Development Programs of implementation states
d) The FADAMA III Project in Sokoto State
e) Private companies: Notore Chemical Industries, Ltd., Candel Agrochemicals, Ltd., Premier Seeds and African Agro Company.

Project Activities and Achievements

The table below shows the achievements of the EASE Project throughout the life of the project (LOP) against key indicators.

Indicator number	Indicator title	LOP Targets	Achievement
EAS 1.1.2	Number of MFI partners trained to deliver BDS training	15	15
EAS 1.3.1	Number of MFI supported by USG financial/technical assistance	15	14
EAS 1.3.2	Amount of finance leveraged or disbursed by MFI	$1.4M	$1,319,438
EAS 1.3.3	Number of borrowers accessing USG-assisted MFI	11,000	7,137
EAS 1.3.4	Total savings deposit held by USG-assisted MFI	$40,000	$86,705
EGE 4.5.2-7	Number of individuals who have received USG-supported short-term agricultural sector productivity training	550	1,217
EGE 4.7.3-3	Number of micro enterprises participating in USG-assisted value chains	2,750	3,269
EGE 4.7.3-4	Number of micro enterprises receiving BDS from USG-assisted sources	11,000	16,539
Other indicator	Number of technology or management practices made available for transfer as a result of USG assistance	14	12

The EASE Project employed a range of integrated activities and strategies to achieve the targets shown above. These are described below, segregated by each Intermediate Result (IR).

IR1: Enterprise Development Training to Build Management and Business Skills of Beneficiaries

i. ***Training of Trainers (TOT) on Facilitation of Business Skills Training for Agricultural Enterprises:*** PFD selected two participants from each of the 15 EASE partner organizations and trained them on facilitation of skills and provision of business development services (BDS) for agricultural enterprises. The five-day TOT workshop was designed to provide the participants with the necessary skills to facilitate the Nigeria Agricultural Enterprise Curriculum (NAEC) used by the EASE Project in providing business development skills (BDS) to agricultural producers and processors. PFD trained and certified a total of 57 trainers from the 15 partner organizations that provided business/management skills training to beneficiaries of the EASE Project; the majority of these were trained during the first year of the project. Each of the EASE partners then developed a training plan (monitored by PFD for quality and content) for delivery of training to beneficiaries in the communities.

Participants at NAEC training session

ii. ***Training-of-Trainers (TOT) on Facilitation of Business Skills Training for Non-Agricultural Enterprises:*** PFD also trained facilitators from the partner organizations on the use of an adapted "Competency-Based Economies through Formation of Enterprise" (CEFE) curriculum for provision of business skills training to clients engaged in non-agricultural businesses. This second curriculum, like the NAEC, utilizes experiential learning methodologies and targets both pre-literate and illiterate clients with simple/practical demonstrations to illicit learning. The curriculum includes modules on problem solving skills; managing external/social pressures; competition and cooperation; marketing and marketing skills; cost-benefit analysis; and savings and credit management.

Achievements: EASE Project partners provided business and management skills training to 18,539 beneficiaries (owners of small agricultural and/or petty trading businesses) in the four implementation states. Of these beneficiaries, 12,768 (77%) are women. The chart below shows the distribution of business/management skills training beneficiaries by location and gender. The comparatively high rate of female to male participation in Bauchi is largely attributable to

the partner organizations in that state, which are focused on providing services to women specifically.

An assessment of the business and management training to beneficiaries showed that 87% of beneficiaries increased sales of their produce/products after receiving business skills training during EASE.

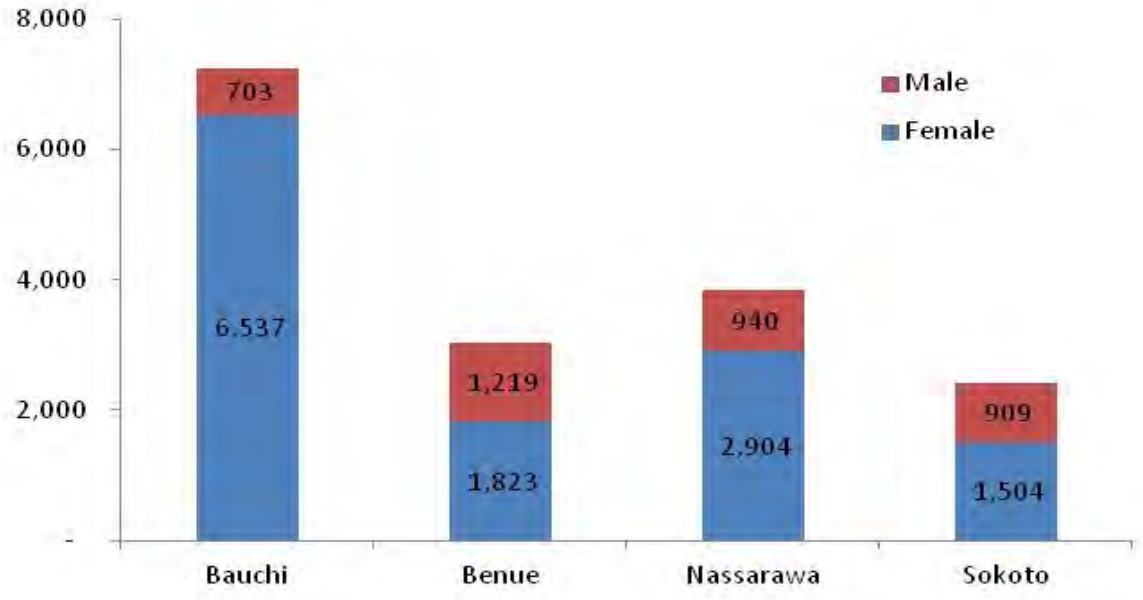


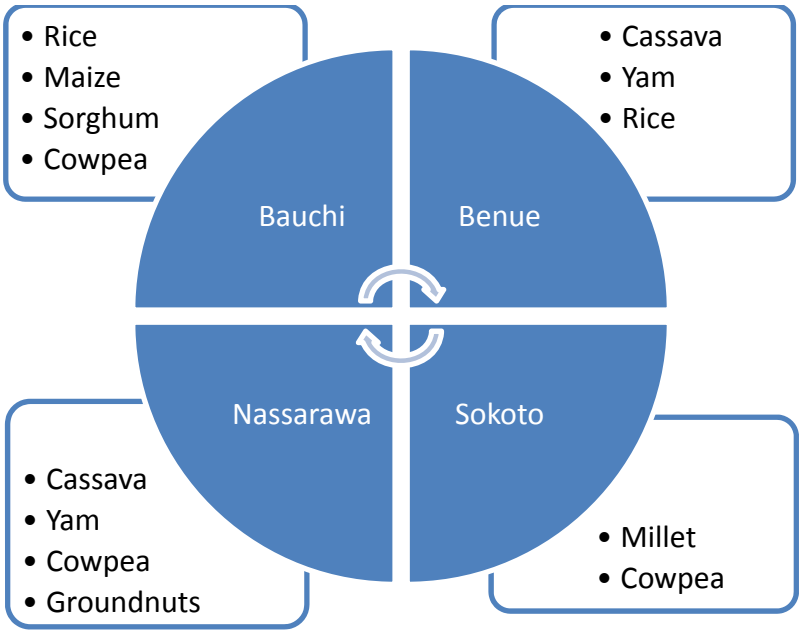
Figure 1: Distribution of business skills training by state and gender

IR2: Value Chain Strengthening and Targeted Technical Assistance to Alleviate Constraints

i. ***Value Chain Analysis:*** At the commencement of the EASE Project in 2010, PFD provided training to partner staff on the process and methodology of conducting value chain analysis in the communities. EASE Project partners then worked with community members to select several crops for analysis by using standard and agreed upon selection criteria (see box at right). In the selection of the crop to analyze, PFD engages community members through a participatory approach and ranking process. The highest ranking crop in each location is picked for detailed value chain analysis. Below is a chart showing crops analyzed by project participants using the value chain methodology.

Criteria Used in Crop Ranking

i. Present participation of the rural farmers
ii. Potential to increase income.
iii. Strong market demand.
iv. Possibility for scaling up production.
v. Potential for women participation.
vi. Environmental sustainability.
vii. Potential for the value chain actors to achieve up-grading value added.
viii. Low barriers to participation of rural farmers.



After selecting a crop for value chain analysis, the EASE Project team, consisting of PFD and partner staff, gathered information on it, including the key actors, their interrelationships, marketing channels, constraints hindering the productive capacity of the actors, and opportunities for improvement. Methods used for gathering information during value chain analysis included:

a. Survey of NAEC training beneficiaries and MFI borrowers
b. Small group discussions with key players in value chains in the communities
c. Interviews with key informants in the communities
d. Review of existing studies or reports on the value chain (from donors, NGOs, government, and research institutions.)

ii. ***Value Chain Stakeholder Workshops:*** Issues and constraints identified in the analysis of any crop were presented to value chain stakeholders in a workshop facilitated by PFD. At the workshops, stakeholders offer solutions to identified constraints and in some cases suggest possible providers of such solutions. Typically, stakeholders invited to these workshops include representatives from the private sector (including famers, processors and input suppliers), Ministry of Agriculture, State and Local Government Area Agricultural Development Programs (ADP), and the Nigeria Agricultural Credit and Rural Development Bank (NACRDB).

iii. ***Technical Assistance:*** In addition to recommendations for improvement, representatives of value chain actors at the stakeholder workshops also suggest possible solutions to capacity

related constraints (technical assistance) and, where appropriate, local service providers. PFD then works with other EASE partners to contract such providers to provide such technical assistance. A sample technical assistance plan stemming from one such workshop is provided as an appendix to this report. The table below indicates the different types of technical assistance provided by geographic area.

State	Local Government Area (community)	Technical Assistance
Bauchi	Bauchi, Toro, Dass, T/Balewa and Ganjuwa.	Organic farming techniques
	Bauchi, T/Balewa, Ganjuwa, Kirfi, Alkaleri	Modern storage techniques
	Bauchi, Dass, Toro and Ganjuwa.	Farmers group formation
Benue	Makurdi, Gboko, Otukpo, Ohimini, Lafia	Organic farming techniques
	Makurdi, Gboko, Ushongo, Otukpo, Ohimini, Lafia	Modern cassava production techniques
	Gboko, Otukpo, Makurdi	Cassava processing, storage and preservation
	Gboko, Otukpo, Makurdi	Cassava diversification and fortification techniques
	Makurdi	Yam minisett production technology
Nasarawa	Lafia	Organic farming techniques
	Lafia	Modern cassava production techniques
	Lafia	Cowpea farmers group leadership/dynamics
Sokoto	Bodinga, Denge-shuni and Rabah	Improved cowpea production
	Bodinga, Denge-shuni and Rabah	Appropriate and efficient utilization of agro-inputs

Achievements: EASE project provided technical assistance to 1,217 individuals, introducing them to one or more of a total of twelve improved production or processing technologies or management practices in the four implementation states. This included technical assistance on the production of organic fertilizer that was provided to 300 beneficiaries which has enabled many farmers to produce their own organic fertilizers from agricultural and animal wastes. They no longer

Beneficiaries receiving technical assistance on home fortification of cassava products

rely solely on chemical fertilizers that may not be available when needed.

Through the engagement of a nutritionist, the project trained 75 cassava processors on diversification and home fortification of cassava products using locally available materials. The idea was to improve the nutritional content and palatability of these cassava products. Materials used for fortification include legumes such as cowpea and groundnuts.

Field visit by PFD staffs and farmers to demo plots

Improved cowpea cultivars in demo plot

The EASE Project collaborated with several agricultural input suppliers including Notore Chemical Industries, Ltd., Candel Agrochemical Company, Premier Seeds and African Agro Company to provide farmers with quality inputs/materials and to train them on appropriate usage of these materials. For example, the collaboration with Notore Chemical led to the set up of their outlet in Benue that provided fertilizers in small affordable packs to farmers. Candel trained farmers on specific pesticides for various crops and provided demonstration on safe use of knapsack sprayer. In Sokoto, Notore Chemical and Premier Seeds set up several demonstration plots in farmers' field to train farmers on improved agronomic practices and benefits of using improved seeds.

Other technical assistance sessions facilitated by the EASE Project included yam minisett multiplication techniques, group formation and association building, improved grain storage and preservation methods.

IR3: Improving Financial Service through Increasing Credit Availability and Facilitating Electronic Repayment

i. ***Loan Disbursement:*** At project inception, PFD provided loan funds of approximately $250,000 to EASE partners in Bauchi, Nassarawa and Sokoto States for on-lending to project beneficiaries in the implementation states. With this initial loan investment by PFD, EASE partners were able to provide $1,319,438 in micro and small loans with an average size of $185 to 7,137 borrowers (94% women) through repeat loans. The partners also mobilized $86,705 in savings deposits from project beneficiaries, while achieving an average loan repayment rate of 87% over the project period. The table below summarizes EASE Partners credit activities during the project period.

ii. ***Electronic Loan Payment System:*** PFD's efforts to implement an electronic payment system under the EASE Project were intended to improve cost-effectiveness of credit activities of EASE partners. It was also expected to improve the safety and convenience of moving cash for credit officers during cash disbursement and collection. This component was intended to be implemented during late 2012 and early 2013; however the launch of this component of the project experienced delays due to anticipated government

Training on electronic payment platform by Stanbic IBTC Bank

regulation of mobile financial services. The proposed regulations caused mobile banking providers to be less flexible on their fee structures; as a result, the mobile banking component became too costly for the project's beneficiaries. However, during late 2012 and early 2013, PFD established a partnership with Stanbic IBTC Bank, one of the licensed providers of electronic payment services, to train EASE partners and to provide the platform for electronic funds transactions. In the spring of 2013, Stanbic IBTC Bank personnel trained EASE partner staff in the utilization of their mobile money platform for microfinance operations. Besides real time transaction notification, the Management Information System (MIS) within the platform also enabled ease of reporting for the EASE partners.

Summary of EASE Partners' Credit Activities

Indicator	**Beneficiaries**		
	Male	**Female**	**Total**
Cumulative number of clients	854	16,849	17,703
Cumulative number of borrowers (new/repeat) loans)	397	6,740	7,137
Cumulative number of depositors/savers	1,767	16,232	17,999
Cumulative Value ($) of loans disbursed including repeat loans			1,319,438
Cumulative Value ($) of deposits			86,705
Cumulative average collection/repayment rate			87%

Monitoring and Evaluation

PFD staff carried out periodic supervisory visits to partners' offices and communities implementing EASE to assess progress on activities implementation and timely achievement of targets, and also to provide technical support and mentoring services in identified areas of need. PFD also carried out quarterly and mid-term reviews of project activities to ensure that activities were implemented in line with project objectives.

In addition to regular monitoring activities, PFD undertook two evaluative assessments. The first examined the effectiveness and impact of the business development services trainings on beneficiaries' economic well-being. The second evaluated the effectiveness of the technical trainings on production, processing, and marketing that PFD provided to beneficiaries during EASE. These complete reports will be shared with USAID when they are completed in early 2014.

Staff of USAID and Nigeria Monitoring and Evaluation Management Systems (NMEMS II) also visited PFD and other EASE partners on several occasions for data verification and validation – Data Quality Assurance (DQA). Besides DQA, NMEMS II staffs also supported PFD in the development of EASE Performance Management Plan (PMP) and in standardizing reporting tools according to USAID requirements. NMEMS II also managed the Performance Reporting System (PRS) that collated, analyzed and reported quarterly quantitative data for all USAID grantees.

Environmental Compliance

PFD followed USAID procedures and regulations in carrying out all its activities within the project duration. Though EASE project interventions are in the excluded category – business skills training, value chain development, and provision of credit - PFD ensured that interventions are provided in a manner that is not injurious to the environment or to human health. PFD also ensured that collaborations with other organizations and agencies through productivity enhancement and introduction of new technologies, such as the application of pesticides and fertilizers, are carried out in a manner that does not have adverse effect on the environment.

Project Sustainability

PFD implemented EASE project in partnership with 15 indigenous partners (most of which were community-based organizations). Being resident in the communities where EASE was implemented made buy-in by communities easier; partners continued to provide services even when it was difficult for other organizations especially during communal crisis situations. In addition, some project opportunities listed below continued beyond life of project.

The EASE Project supported the development of fee-for-services among its partners, particularly for the business/management skills training, which supports some of the expenses. Some partners have adopted a fee-for-service structure for the NAEC training as an element of sustainability. Over the life of project, total amount received as fees by these partners was approximately $14,828. EASE partners that are microfinance institutions (MFI) also generated revenue through their lending activities, which allows them to continue and expand their lending operations.

Challenges

Major challenges faced by EASE Project include:

1. High levels of staff turnover or attrition among implementing partners: Most of the trained implementing partners' staffs have left their positions, resulting in adverse

effects on implementing partners' operational efficiency, additional cost of hiring and training new staff, and delays in project implementation and reporting.

2. Security threat in states of project implementations: EASE implementing partners were faced with Boko Haram sect insurgences and other political issues such as inter-tribal and communal clashes in their various project communities. This slowed expansion of project activities to unreached communities, and limited the progress achieved especially in the microcredit component of the project. Partner MFIs in Bauchi and Nassarawa States were worst off in this regard.

3. Over-estimated demand for credit: During the project design phase, PFD posited that agricultural producers, processors and others would benefit most from access to small amounts of credit. On this understanding, PFD established a target of 11,000 borrowers accessing credit through PFD's microfinance partners. However, during implementation, PFD found that beneficiaries were far more interested in savings than in credit. As a result, the number of borrowers is lower than expected but the number of savings clients is exponentially higher than projected.

4. Electronic payment system challenges: There was an initial hiccup to find an e-payment service provider with whom to negotiate, since the budget for this project component fell far short of providers' fees at the time of implementation. Compounding these problems are serious and consistent problems with the operation of Nigeria's mobile communication networks, which further affected smooth operation of the system.

Success Stories

There were couples of human interest stories garnered from the beneficiaries of EASE project in all the States of project implementation on each project component and activity. The underneath stories gave credence to what has been done and the impact of the project on the beneficiaries.

1. **"No more chemical fertilizer!"**

Mr. Haruna Gomwen lives in Rafin Zurfi, a suburb of Bauchi metropolis. He is a beneficiary of technical assistance on preparation of compost manure as an alternative to inorganic manure provided by EASE consultants in March 2011 just before the raining season. According to

Haruna Gomwen collecting animal dung for composting and making organic fertilizer

the beneficiary, “After my retirement from the Nigerian Army, I decided to engage myself in carpentry work, a skill I learned while in service. In addition I engaged in farming, because the proceeds from the carpentry job were not regular and needs were piling. I also bought some cows, goat and sheep from my little savings.”

“Prior to the training, the animal dung was simply allowed to waste in the field. After I attended the training on organic fertilizer production organized by PFD early last year, I learned the skills on preparation of compost manure. Since then I decided to put to practice what I learned by digging a pit close to my house and ensuring that all the animal waste as well as dirt around my house are properly collected and piled into heaps. These heaps are later gathered into the pit and properly covered with polythene. When decomposed, the material are transferred to my maize farm and applied as organic fertilizer. I experienced a bumper harvest last year farming season where I got 23 bags of corn compared to 5 bags earlier harvested from the same farm. I shared the secret with two of my friends, Mr Bakari and Mr Dauda, all of Rafin Zurfi community who showed interest and have also introduced this to four other farmers. I am planning to expand my farm this year and also share this knowledge with many as possible with my slogan NO MORE CHEMICAL FERTILIZER.”

2. Connecting farmers to inputs

Smallholder farmers interviewed in value chain analysis of several food crops in Benue State (cassava, rice, yam, etc.) identified access to quality agricultural inputs (pesticides and fertilizers) as one of the major factors limiting their production capacity. EASE partners confirmed these concerns through triangulation with other stakeholders in these value chains. To help address some of these issues, PFD facilitated stakeholder workshops for these crops and invited major actors in these value chains (including Candel Agrochemical Company, Notore Chemical Industries, and staff of government managed agricultural development programs) to attend the workshops. Through these linkages, PFD facilitated technical assistance sessions in which Candel and Notore trained local farmers in several communities in Benue State on the use of their products. After the technical training

Candel staff selling pesticides after a TA session to EASE beneficiaries

sessions, Candel sold products to interested farmers and local/community input dealers at reduced rates.

3. Purchase incentives for new customers

Notore established a branch in Makurdi, Benue State to service Benue and neighboring states. As a result of the collaboration with PFD's EASE project, Notore distributed coupons to 750 beneficiaries (mostly farmers) to procure quality fertilizer from any Notore outlet closest to their communities at subsidized rate. Farmers carrying these fertilizer coupons are recognized by dealers at the Notore outlets as EASE beneficiaries and attended to as priority. This linkage has created a win-win situation through which farmers' access quality input in a timely and discounted rate, while the agrochemical companies have access to a ready market of EASE farmer beneficiaries (who are also able to access credit through the program).

Front view of Notore fertilizer voucher purchased by farmers

4. Improved Business Practices

Mr. Osayi Baba, a poultry and fishery farmer, resides in Tudun Gwandara community of Lafia LGA, Nassarawa State. He is married with four children. Osayi Baba and his wife are living positively with HIV. "I used to buy and sell eggs and broilers before I took ill, however my business capital was spent on different visits to hospitals while searching for the cause of my illness, my business suffered and there was no sufficient capital to run the business."

Mr. Baba at his fish farm

"I heard of FAHCI's (an EASE Project partner) economic strengthening program through the PFD supported loans, I enrolled, applied and was supported with micro-credit loan of N30, 000 payable in six months to revive my poultry business. In addition to this money, I was also trained on how to effectively and efficiently manage my business. The most interesting components of this training were sessions on business planning, savings, record keeping, cost and benefit analysis and business diversification, which has contributed greatly to my success today. This knowledge and skills acquired has tremendously improved my business. My

relationship with customers and business partners has also improved greatly. Following this knowledge, profit made from my poultry business and additional loan approved for me, I have diversified my business into fishery farming which I found to be very lucrative and in high demand within my community". Osayi has been one of FAHCI's successful loan beneficiaries. He is currently on his third loan stage (N150, 000).

Osayi Baba confirmed that he pays back the loan he received with ease, "My business success depends on commitment, regular planning and re-planning. That is why the business is growing even though some times business fluctuates but paying back my loan is always on time."

Appendices

Appendix 1: Nigeria Agricultural Enterprise Curriculum (NAEC)

Curriculum Development Partners

Making Cents International, based in USA, designed and produced the concepts and materials. Other partners are: USAID – MARKETS Project; DFID – PrOpCom Project; National Fadama Development Project and the Special Program for Food Security of the FGN; GTZ – Employment Oriented Private Sector Development Program (EoPSD); and Partners for Development.

Objectives of Curriculum

- To enhance understanding and awareness of basic business concepts of farmers can help improve their production and maximize their profits.
- To help farmers understand relationships in the value chain (suppliers, producers, wholesalers, retailers and consumers).
- Assist farmers discover practical methods and techniques that will allow farmers move from subsistence to commercial farming practices (e.g. planning; income projections; savings; etc.).
- Improve financial management, record-keeping, and market analysis skills of farmers.

Target Audience

The curriculum is designed to work in communities with low literacy and even with pre-literate farmers as long as some of the participants are functionally literate and can serve as leaders in small group work.

Training Environment and Duration

The curriculum includes approximately 15 to 20 hours of classroom materials. The curriculum can be delivered in multiple days or session settings, depending on the needs or availability of the target beneficiaries. The curriculum training modules can be selected to modify training sessions to less than 20 hours but this will necessarily limit the number of concepts and skills that are taught and emphasized.

It is a classroom-based, instructor or facilitator-led training session. Sessions ideally should include 20-30 farmers belonging to a particular value-chain/commodity. Typical equipment required are chairs and tables for participants to work in teams and flip chart or black board for facilitator or trainer.

Instructional Techniques and Methodologies

The curriculum is delivered by role-playing, simulation and other exercises that enable participants to experiment and discern how they can apply some lessons learned in the training to their individual businesses. The curriculum utilizes hands-on, experiential adult learning methodologies that include:

- Guided discussions on specific topics through which the facilitator elicits participants knowledge and raises their awareness
- Small group activities/discussions around cases or scenarios related to key learning points
- Practical exercises that offers participants the opportunity to boost their skills and learn business techniques through problems to be resolved in class
- Simulation which is an exciting, interactive that enables participants mimic crucial decision-making points in the agricultural year (from planting to harvesting) in a board game
- Individual action plans that enable participants determine next steps after the training using workbooks (common notebooks) they receive in the training

Course Modules:

1. Farm Business Cycles
2. Keeping Farm Business Records
3. Business Planning
4. Purchasing Decisions
5. Calculating Costs and Benefits
6. The Value-chain and Market analysis
7. Basics of Cash Flow
8. Savings and Credit
9. Groups membership
10. Sharing with peers

Appendix 2: Sample Technical Assistance Plan

Concept on Proposed Improved Cowpea Production Techniques for Higher Yield Of Cowpea in Sokoto State: A Training to be Organized by Partners for Development (Pfd) in Sokoto State with Funding from United States Agency For International Development (USAID) for Lead Cowpea Farmers in Sokoto

To be facilitated by Mukhtar Musa, Department of Crop Science, Usmanu Danfodiyo University, Sokoto

Introduction

Cowpea is of vital importance to the livelihood of the people of Sokoto State, from its production; rural families derive food, animal feeds, and cash income. It provides nutritious grain and inexpensive source of protein for both rural poor and urban consumers. Cowpea grain contains about 25% protein and 64% carbohydrate and therefore has a tremendous potential to contribute to the alleviation of malnutrition among resource-poor farmers. In addition, the crop contributes to the sustainability of cropping systems and soil fertility improvement. The crop has been identified as the most economically cultivated crop in the semi-arid tropics, Sokoto state inclusive, providing satisfactorily yield and income under resource-poor farming conditions. Despite the numerous benefits of the crop, the yield obtained by farmers in the State is very low which could be attributed to various production constraints from sowing to harvesting, processing and storage. This training is therefore aimed at addressing some of the constraints and to provide farmers with the basic training required to handle cowpea production/post production constraints.

Topic	**Activity**
Proper usage and handling of fertilizer materials	The farmers will be trained on the appropriate usage and handling of both organic and inorganic fertilizers in addressing soil fertility constraint for maximum yield.
Selection of suitable planting materials	The farmers will be highlighted on the availability of various planting materials and how to match the objectives of production with variety selection. Also, farmers will be highlighted on the improved varieties that are resistant to striga and other important pests.
Striga control options	The farmers will be trained on improved striga management practices such as selection of resistant varieties, proper use of fertilizer, good crop rotation practices and other cultural practices.
Field control of insects and pathogens	The farmers will be trained on the use of non-chemical control practices.
Control of storage pests	The farmers will be trained on the use of non-chemical cowpea storage methods including the use

of triple bagging, use of air tight storage such as used plastic drums or jerry cans.

Requirements for the training

1- Improved cowpea seed packets for demonstration at least five varieties to include the grain type, forage type and dual purpose types
2- Striga resistant cultivars at least five varieties
3- Used plastic containers and triple bags for demonstration
4- Organic fertilizer, SSP and Urea for field demonstration