



INTERNATIONAL JOURNAL OF PHYTOFUELS AND ALLIED SCIENCES
(A Journal of the Society for the Conservation of Phytofuels and Sciences)
(<http://www.phytofuelsciences.com>) (ISSN 2354 1784)

Determination of Capacity Level of Oyo State National Jatropha Biofuel Development Association for Integration into Value Chain System

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ABSTRACT

The focus of this research study was to determine the capacity level of the Oyo State National Jatropha Biofuel Development Association (NJBDA) and readiness to be integrated into value chain system. The population of the study consisted of all members of the association while all the executive members were purposively selected. Group interview technique was used to elicit information for the qualitative data. The Producer Group Business Practices Assessment Tool; "Integrating Very Poor Producers into Value Chains Field Guide" adapted by Dan Norell and Margie Brand was used to collect data. Capacity level was measured on a four point scale focusing on 7 major capacity determinant of the assessment tool. Results of the study showed Leadership, governance and strategy activities had the highest average capacity score of 3 (100%); Finances was 1.6 (40%); Organization structure 2.3 (58%); Project planning, design, and implementation 2.5 (63%); and Networking and advocacy 2 (50%). In conclusion, Oyo State NJBDA was at high capacity levels in 4 (Background; Leadership/governance; Organization structure; and Project planning design and implementation) out of 7 group capacity determinant activities. The capacity level for networking and advocacy was average, financial activities and technical skills and experiences were low since the role of chain supporters, value addition and market linkages were not listed. For Oyo State NJBDA to be 100% ready for integration into a value chain system of sustainable jatropha production processing and entrepreneurial ventures; the association needed to teach members the organization capacity building courses of leadership, business management, finance, transparency, basic accounting, and development of business plans; and build strong networking and advocacy strategies with chain supporters such as research institutions, extension, and government agencies for good trainings and policies formation and implementations. Further studies were needed to determine the strength of business relationships within and outside the association; and evaluate value chain supporters involved in the Oyo State NJBDA and the vertical and horizontal linkages among the chain supporters.

Key words: Capacity Building, Entrepreneurial Ventures, Jatropha Value Chain

INTRODUCTION

The cry for climate change mitigation and need for renewable energy sources all

over the world created greater awareness and sensitized the public and stakeholders in Nigeria to look into the development of

jatropha growing and use as a renewable energy source. These have led to the formation of National Jatropha Biofuel Development Associations (NJBDA) in different states of Nigeria. The Oyo state farmers became one of the foremost jatropha based associations across Nigeria formed in 2009. Members were passionate about growing, processing, marketing, and using jatropha. To increase productivity and economic returns, members met every month of the year and major issues of concern discussed in the meetings included jatropha value chain systems, sustainable production, and entrepreneurial. Moreover, value chain interventions are increasingly popular amongst donors aiming to promote market-oriented growth and poverty reduction (Humphrey and Navas-Aleman, 2010)

The report of Royal Tropical Institute and Common Fund for Commodities (2011) pointed out that agricultural development initiatives focus not only on food security and production, but also increasingly on income

generation, local economic development, value addition and value chain development. Dan Norell and Brand (2012) indicated that value chain includes all the actors that participate in bringing a product or service from its conception to its end use in the market, as well as the extent and type of relationships between these actors. Value chain development involves strengthening these product-to-market systems.

Also, Shepherd, et.al (2009) indicated that associations in a value chain system draw membership from farmers, traders, processors, importers, exporters, and sometimes input distributors, storage companies, and transporters are represented by associations or similar organizations; and they tend to have much greater strength when advocating policy or regulatory changes. They also can play an important role in promoting the particular interests of their members and conducting a broad range of other activities, such as product promotion, quality

development, training, and information provision.

As indicated in the report of Royal Tropical Institute and Common Fund for Commodities (2011), in a value chain system, three broad categories of stakeholders include chain actors, chain supporters, and those that function within the chain context. Chain actors are the individuals and organizations that produce, buy and sell the commodity these include farmers, traders, processors, retailers and consumers. These chain actors buy or sell the product, may bulk it, process it, package and transport it, and distribute it to the final consumer. Most are private-sector companies, though in some countries government bodies still buy and sell certain products. Chain supporters are those stakeholders that provide services that enable the chain to function and these include research, extension, quality control, export, business development services, finance, and others. Chain supporters also include development project coordinators and

implementers such as contractors, government agencies and NGOs. Chain context stakeholders influence the context in which the chain functions and they include decision makers in local and national governments and international organizations that set the scene and affect the environment of the chain. They make decisions that affect the wider context, such as infrastructure, legislation and education.

KIT and IIRR (2008) and (2010) indicated that improving the interactions between chain actors is the focus of value-chain development initiatives. Improving service provision by chain supporters is an example of improved stakeholder interaction. According to Hall et al. (2006), innovations result from interactions among the different stakeholders. That is, interaction among stakeholders result in creating and strengthening linkages, helping farmers identify markets and sources for credit.

According to Royal Tropical Institute and Common Fund for Commodities (2005),

building capacity is an important aspect of many commodity projects and this can be individual, organizational and institutional. Individual capacity building involves improving the personal capacity to perform through training, practical experience and the appropriate incentives required for improving individual performance. Organizational capacity building involves improving the capacity of stakeholder groups to carry out their functions in the commodity system through strengthening existing and building new organizations. And Institutional capacity building involves improving the capacity of the commodity system to function effectively through interactions among stakeholders and appropriate policy environment.

Royal Tropical Institute and Common Fund for Commodities (2011) also indicated that commodity project needs to invest significant amounts of effort and resources into capacity building. It was further explained that the activities involved in capacity building include providing training to

the beneficiaries directly through public agencies, farmers' organizations and NGO advisory services; strengthening organizations; organizing chain actors organization such as small-scale producers or processors to access services and connect to market opportunities; improving chain supporters services such as research and extension, information and advice, input supply, quality-control systems, model production centers, trade centers, marketing support and financial services; and improving interaction among stakeholders and chain supporters in the commodity chain.

As pointed out by Shepherd, et.al. (2009), commodity associations' activities should include but not limited to the following: Advocacy and trade negotiation; promotion and quality development; training provision; market and other information provision through electronic newsletters, monthly and annual reports, website publication, etc; overcoming logistical difficulties; and research activities. Other

activities include procession of quality control equipment, providing arbitration role, and linking production and marketing through contract farming or out grower arrangements.

Given the foregoing, this study focused on determining the capacity level of Oyo state NJBDA for integration into value chain system. This is because the association is one of the foremost jatropha base associations across Nigeria. Determining the capacity level of the Oyo state NJBDA will facilitate the integration of the members of the association into a market oriented value chain system for sustainable production, processing and entrepreneurial ventures of jathropha biofuels in Nigeria.

Specific Objectives of the Study

The specific objectives of the study were to determine:

1. The background characteristics of the Oyo State Chapter of the National Development Association of Nigeria.

2. The leadership, governance, and strategy used in the association business activities.
3. The financial planning, management and budgeting of the association.
4. The association structure.
5. Planning, project design, and management of the association.
6. Networking and advocacy of the association
7. Technical skills and experience of the association

METHODOLOGY

The population of the study consisted of all members of the Oyo state NJBDA while all the executive members were purposively sampled for the study. This is because they were the ones handling all the business activities of the association. Both secondary and primary sources of data were used in the study. Secondary data were collected by going through the historical records on a visit to the association's headquarter office in Ibadan.

The primary data for the study was collected

using group interview technique and interaction with all the executive members. To elicit information from the group "The Producer Group Business Practices Assessment Tool - Integrating Very Poor Producers into Value Chains Field Guide" adapted by Dan Norell and Margie Brand (2012) was used. The tool specifically focused on the following seven major capacity level determinant characteristics: 1) Background information of the Oyo State NJBDA; 2) Leadership, governance, and strategy; 3) Financial planning, management and budget; 4) Organizational structure; 5) Project planning, design, and management; 6) Networking and advocacy; 7) Technical skills and experience.

Capacity level was measured on a four point scale focusing on 7 major practices of the assessment tools. Each characteristic had indices of measurement in form of questions. Responses provided were scored between 0 and 3 to determine capacity score. The sum of capacity scores divided by number of

questions gave average capacity score that determine the capacity level of the association for each characteristic. Average capacity score above 2 was deemed high capacity level while below 2 was regarded as low capacity level for integration into value chain system. The questions, responses, capacity scores and average capacity scores that determined the capacity levels were analyzed and presented in tables of results.

RESULTS AND DISCUSSION

The results of secondary data included the following historical records of the association: Copies of the constitution, letters of association's registration and approval, list of registered members, minutes of monthly meetings, and tabulated monthly contributions. Flyers, postals and letters of invitation for major activities were also discovered. Thus the data showed that: 1) The Oyo State NJBDA was a legal stakeholder in the sustainable development of jathropha in Nigeria; 2) Association members met every month at their various ward

headquarters and quarterly at the state headquarter in Ibadan; 3) Other stakeholders included farmers, interested individuals, youth groups, women groups, professionals, and companies from neighboring states such as Kwara, Ekiti, Osun, Ondo, Ogun, and Lagos; and 4) The monthly meetings went through the normal administrative procedures of praying, reading the minutes, matters arising from the minutes, training sessions and presentations from resource persons and members of the association, money contributions and closing prayers.

The primary data collected from the field guide tool administered to the group of officials of the Oyo State NJBDA were analyzed and the results were presented in table format. Table 1 showed that the association was a national association; comprised of jatropha growers/producers, Processors, Distributors, Storage, Marketers, and Exporters. These were located in each Local Government Headquarters and Oyo State Capital City, Ibadan. The association

was established officially in May, 2012 and had 7 Part-time staff at the state headquarter plus at least 15 Volunteers. The number of staff in each LGA depended on the size of the association. Total number of registered members in Oyo State was 1,600 and they are in partnership with other stakeholders such as Oyo State Ministry of Science and Technology, Kwara State University, and Institute of Agricultural Research and Technology (IAR & T). Thus the results of the association background indicated that she was ready to be integrated into a value chain system.

In Table 2a responses to questions showed that the association had written constitution approved by representatives of the community and association; had regular meetings with useful guidance and decisions made for the association. Mission and values were agreed upon by all stakeholders and were regularly used to guide decisions about projects and activities. As shown in Table 2b, for the leadership, governance and strategy

questions, each of the executive's response scored the highest capacity scores of 3. This gave an average capacity score of 3, indicating high capacity level. Thus, the leadership, governance, and strategy of the association seemed to be at the highest level of capacity needed to be integrated into value chain system. Thus the results of the secondary data and that of Table 2 were supported by Norell and Brand (2012) who pointed out that producer group in value chain system documentation should include name and location of group; founding members and date; objectives/constitution; leadership; meetings; recordkeeping and procedures for amending constitution or terminating the group.

Responses in Table 3a showed that the association was not adequately planning/budgeting and managing/recording her financial activities. However, they had people controlling how money came in and went out. As shown in Table 3b, The response on financial control scored a high

capacity of 3, while other responses to budget planning and management questions had low scores of 0, 1, and 2. The average capacity score was 1.7, indicating low capacity level needed to be integrated into a value chain system. Therefore in line with Norell and Brand (2012) recommendations, there was need to teach members of the association organization capacity building courses of leadership, business management, finance, transparency, basic accounting, and development of business plans that would enhance value chain financing by commercial banks.

As shown in Table 4a, the association held regular monthly meetings, owned an office with equipments, and had non-salaried staff (5-15 volunteers). In Table 4b, responses to questions had capacity scores of 3 which was high for organization structure except for number of volunteers that had low capacity score of 1. The average capacity score of 2.3 indicated high capacity level though this needed to be raised to level 3 in

the process of being integrated into a value chain system. Thus, the association needed to have one or two full-time staffs that are paid salaries and volunteers should all have specific areas of responsibilities.

In Table 5a, responses to questions showed that the association had 2-5 years strategic plans, developed annual work plans, documented monitoring and evaluation with feedback to members. However, they had no project framework nor funding from other chain actors. In Table 5b responses showed high capacity scores of 3 except for score of 0 for project and proposal development. Though the average capacity score of 2.2 indicated high capacity level, the association needed capacity building in project and proposal development/management in order to be ready for integration into the value chain system. This is supported by Shepherd et al. (2009) who pointed out that the evidence gathered by Giuliani *et al.* (2005) on the governance of agricultural value chains in Latin America showed existence of very high levels of joint

action of inter-professional associations engaging in trade promotion, basic research and extension, technology transfer and provision of other services to small farmers.

In Table 6a the capacity scores for responses on advocacy and networking questions were 1 and 3 respectively. The high capacity score of 3 in networking indicated that the association was able to mobilize the general public to be aware of jatropha growing for biofuel. This also indicated that the association had effective partnerships working together; sharing resources; or referring clients to local government, private, or community associations. However, the average capacity score of 2 as shown in Table 6b indicated that the association had an average capacity level in networking and advocacy. Networking and advocacy activities that would influence those in power to change conditions or policies were needed in order to be integrated into the value chain system. Thus, the results was supported by Hall et al. (2006) who pointed out that innovations result

from interactions among the different stakeholders since this result in creating and strengthening linkages that help farmers to identify markets and source for credit; and KIT et al. (2006), KIT and IIRR (2008) and (2010) who indicated that improving the interactions between chain actors is the focus of value-chain development initiatives.

For the Technical skills and Experiences of the Oyo State NJBDA, the respondents indicated that through the monthly and quarterly training meetings among the members over the years, they had acquired various technical skills and experiences in the following areas: a) Acquisition of land for association members to grow jatropha; b) Planting techniques; c) Raising and selling jatropha seedlings; d) Maintenance of jatropha farms; e) Harvesting and storing seeds; f) Pressing oil from jathropha seeds; g) Buyback of seeds within the system; and h) Targeting concentration and commercialization to meet local and international jatropha oil demands. The

capacity level in this area was considered low compared with the Royal Tropical Institute and Common Fund for Commodities (2011)'s requirements that should include training and extension; research and development; equipment and buildings; organizational strengthening; marketing; improving interaction among stakeholders; and communication.

CONCLUSIONS AND RECOMMENDATIONS

In conclusion, Oyo State NJBDA was at high capacity levels in 4 (Background; Leadership/governance; Organization structure; and Project planning design and implementation) out of 7 group capacity determinant activities. The capacity level for networking and advocacy was average, financial activities and technical skills and experiences were low since the role of chain supporters, value addition and market linkages were not listed. For Oyo State NJBDA to be 100% ready for integration into a value chain system of sustainable jatropha production,

processing and entrepreneurial ventures; the association needed to teach members the organization capacity building courses of leadership, business management, finance, transparency, basic accounting, and development of business plans. They also needed to build strong networking and advocacy strategies with chain supporters such as research institutions, extension, and government agencies for good trainings and policies formation and implementations.

Further studies is needed to determine the strength of business relationships within the association members in terms of farmer business school for group leaders, replication of trainings among members, business planning, access to financial services and functional adult literacy training. Also, there is the need to study and evaluate value chain supporters involved in the Oyo State NJBDA and the vertical and horizontal linkages among the chain supporters

Table 1: Background of Oyo State Jathropha Biofuel Development Association

Background Questions	Executives Responses
1. Name/Title of Organization	Oyo State Jathropha Biofuel Development Association of Nigeria
2. Type of Organization	National
3. Type of Stakeholders in the Organization	Growers/Producers, Processors, Distributors, Storage, Marketers, and Exporters.
4. Location details of organization	Local Government Headquarters and Oyo State Capital City, Ibadan
5. Date of the organization establishment	May, 2012
6. How many staff does the organization have – Part-time and Volunteer?	7 Part-time staff at the state headquarter plus at least 15 Volunteers; and the number of staff in each LGA depended on the size of the association
7. Size of the organization/population target	Total membership throughout Oyo state was about 1,600
8. Organization partners	Oyo State Ministry of Science and Technology, Kwara State University, and Institute of Agricultural Research and Technology (IAR & T)

Table 2a: Leadership, Governance and Strategy

Questions		Capacity Score			
		0	1	2	3
1. Constitution	Do you have a written constitution accepted and approved by association members	No constitution	Some rules/principles written down	Written constitution exists but wasn't widely approved	Written constitution approved by reps of the community and association
2. Governing committee / board	Is there a committee/ board that meets & makes decisions guiding the association's development?	No Committee/ meetings	Committee established, but it never met	Occasional meetings, but rarely agree on any decisions	Regular meetings with useful guidance and decisions made for the association
3. Mission and values	Do you have a mission, set of values that are clearly understood, agreed and approved by all association members? If so, how are they used?	No clear mission/values	Can describe the mission/values of the association, but they have never been agreed or written down	Mission/values written down long ago, but few people were consulted or understand them now	Mission and values were agreed by all stakeholders, and are regularly used to guide decisions about projects and activities

Table 2b. Capacity Score and Level of Leadership, Governance and Strategy Characteristic

Question	1	2	3	Total	Average	Capacity Level
Capacity Score	3	3	3	9	3	High

Table 3a: Financial Planning, Management and Budget

Questions		Capacity Score			
		0	1	2	3
1. Finances	Does your association keep written accounting of income and expenses that can be presented on demand?	No accounts kept	Records kept of money received and spent, but difficult to know how much money is held at any one time	Accounts kept up-to-date, balances and statements are prepared at the end of the year	Balances and statements prepared Quarterly. At year end, presented to external stakeholders for review and possible approval
2. Bank account	Does your association have a bank account to hold its funds?	No bank account, all funds managed in cash	Someone's personal account used for any funds	Bank account registered in association's name, which requires authorized check signatories	Manual record of all payments (cashbook) is kept and compared with all bank statements
3. Financial control	Who is responsible for approving expenditure and issuing cash?	One person	Two people	Two people with oversight from another person	Two or more people with oversight from several people
4. Budget and cash flow planning	Does your association prepare, monitor, and review a budget?	Budgets are prepared for every funding proposal but not used for anything else	Budgets are set to decide how much to spend on all project and association costs to ensure there is money for future plans	Budgets are presented annually for approval to a board or representative group of members	Every six months budgets are compared to money already spent and planned cash flows
5. Reporting Requirement	Do you provide accurate financial reports on time to donors?	No experience of having to submit donor reports	Reports are submitted but always late and with incomplete information	Some reports get submitted on time but often incomplete or get queried by the donor	Reports always submitted on time and always meet all donor requirements
6. Profit	What increase in profit have you had over the last year?	None	Up to 10%	10-20%	More than 20%

Table 3b: Capacity Score and Level of Financial Planning, Management and Budget

Question	1	2	3	4	5	6	Total	Average	Capacity Level
Capacity Score	2	2	3	2	0	1	10	1.7	Low

Table 4a: Organization Structure

		Capacity Score			
Questions		0	1	2	3
1. Constitution	Does your association involve a number of salaried staff & volunteers who have different areas of responsibility?	Fewer than five volunteers run the entire association	Five to 15 volunteers with different roles, some lead/manage the association	One full-time staff person is paid a salary and organizes all the other volunteers	1-2 full-time staff are paid salaries, and volunteers all have different, fixed areas of responsibility
2. Staff and volunteer development	How do you ensure that staff and volunteers support and motivate each other and have sufficient skills?	No meetings or trainings. Low skill levels, as volunteers only do basic work	Few meetings. Volunteers sent for training only occasionally	Occasional meetings to share lessons & support each other. Training is provided informally & externally	Regular meetings (monthly), training and team-building activities to keep staff & volunteers motivated
3. Office and equipment	Does the association have office, meeting space & equipment for handling admin reports? What equipment does the association have?	No office, no equipment	Occasional access to another office and equipment	Office & equipment (computer + printer) shared with another association or individual	Own office and equipment (computer plus printer)

Table 4b: Capacity Scores and Level of Organization Structure

Qestion	1	2	3	Total	Average	Capacity Level
Capacity Score	1	3	3	7	2.3	High

Table 5a: Project Planning, Design, and Management

Questions		Capacity Score			
		0	1	2	3
1. Strategic planning	Does the association have a long-term strategic plan developed with participation of all or most staff/ stakeholders who have different areas of responsibility?	No strategic plan	Document that describes briefly what the long term goals and objectives are and how they will be achieved	Strategic plan (2-5 years) that was developed by a consultant or by a few senior staff members	Strategic plan (2-5 years) that was developed in a participatory manner, involving most staff and stakeholders
2. Action plans	Does the association plan implementation of its activities, involving all people concerned?	Association mainly responds to immediate needs, with little planning	Occasional short-term planning, e.g., major events or monthly activities	All ongoing activities are normally planned in advance with all staff and volunteers	Annual work plans are developed and agreed upon with community members, volunteers, staff, board
3. Project and proposal development	Are you satisfied with the quality of the projects you develop? Does the association deliver on the contracts it has with other value chain actors?	Association responds to immediate needs, with no project framework, funded proposals or contracts	Funding has been received for one successful proposal mainly developed by an outsider. No contracts	Funding has been received for at least one proposal in the last three years developed within the association. At least one contract in the past year with other value chain actors	Funding received for at least 2 proposals developed internally in the last three years, each with needs assessments, activity plans, and budgets. At least two contracts in the past year with other value chain actors
4. Monitoring and evaluation	Does your association have a functioning M&E system?	No, association does not do M&E for any of its activities	Association mainly responds to immediate donor requests for M&E data, ad hoc, with little planning	Association has an M&E system, is collecting data on an ongoing basis, and is reporting to donors	M&E is documented - plan available & data inform management decisions & provide feedback to community/ stakeholders

Table 5b: Capacity Scores and Level of Project Planning, Design, and Management

Question	1	2	3	4	Total	Average	Capacity Level
Capacity Score	3	3	0	3	9	2.2	High

Table 6a: Networking and Advocacy

		Capacity Score			
Questions		0	1	2	3
1. Advocacy	Do you carry out advocacy activities to Influence those in power to change conditions or policies that influence your work?	Haven't thought about local policies or conditions. Little or no targeted advocacy work done in the past	Have only mobilized general public for support or awareness raising, but nothing targeted at key people or institutions in power	Have developed targeted activities toward certain groups/policies but have lacked evidence, community voice, or strength of numbers	Have done convincing evidence- or consultation based advocacy, mobilizing allies and using many different communication methods
2. Broader context and potential partnerships	Does your association work with local government, private, or community associations?	Work in isolation. No knowledge of local policies, strategies, or work of others	Some knowledge of local govmt policies and other local associations who are mainly seen as competitors	Understand National/local policy & strategies of other Associations working in this area. Have personal contact with a few other relevant people/ associations	Have effective partnerships working together, sharing resources, or referring clients to local govmt, private, or community associations

Table 6b: Capacity Score and Level of Networking and Advocacy

Questions	1	2	Total	Average	Capacity Level
Capacity Score	1	3	4	2	Average

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