PrOpCom

Making Nigerian Agricultural Markets Work for the Poor

Monograph Series # 14

Survey of Local Fabricators, Retailers and Repairers of Rice Production and Processing Machines

Prepared by

Buffer Engineering & Management Consultancy Services (BEMCONS)

17 April 2007

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SURVEY OF LOCAL FABRICATORS, RETAILERS AND REPAIRERS OF RICE PRODUCTION AND PROCESSING MACHINES

FINAL REPORT

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17TH APRIL, 2007

**SURVEY OF LOCAL FABRICATORS, RETAILERS AND REPAIRERS OF
RICE PRODUCTION AND PROCESSING MACHINES**

EXECUTIVE SUMMARY

1.0   INTRODUCTION

In an effort to facilitate functionality and efficiency of Nigerian commodity and service markets so as to benefit the poor; the Department for International Development of the United Kingdom (DFID) is funding an innovative project known as "***Promoting Pro-Poor Opportunities in Commodity and Service Markets***" (**PropCom**). The goal of PropCom is to improve livelihoods by facilitating pro-poor outcomes and opportunities such as enhanced incomes, increased jobs, improved access to markets, more options and choices and reduced risks.

To achieve above goals, PropCom plans to contribute to removing constraints to efficient market operations and linking market actors to work together and serve each other on a sustainable basis. The project intends to execute these plans along selected commodity chains.

Currently, PropCom is focusing on rice as a primary commodity and Soya Bean as a secondary commodity. To improve on the rice chain, in pursuance to achieving its goals, a survey of local fabricators, retailers and repairers of rice producing and processing machines was planned. Information gathered from the survey will be used to produce a directory of the entities mentioned above for distribution amongst stakeholders of the rice chain. Secondly, the information will generate a picture of impediments, inefficiencies and opportunities that are experienced by these businesses and thus help in determining the

support that may be provided to improve the productivity, efficiency and profitability of these businesses concerned with rice equipment.

To successfully execute the planned survey, eight tasks were proposed. BEMCONS was commissioned as service providers to implement the eight tasks with timeline commencing from 4th March, 2007 and ending on 10th April, 2007. BEMCONS has now completed all the tasks and hereby submits a Final Report which captures all that was done in this project entitled "*Survey of Local Fabricators, Retailers and Repairs of Rice Production and Processing Machines*".

2.0   PROJECT WORK PLAN

As stated in the introduction, eight (8) tasks were mapped out for implementation under this project. These tasks and their time lines are as follows:

2.1   Prepare and submit a work plan giving a general outline of how tasks will be accomplished with proposed dates (4th – 5th March, 2007).

2.2   Review and finalize the basic Data Capture Form and the Needs Assessment Questionnaire; Training of personnel (5th – 8th March, 2007).

2.3   Conduct a data gathering exercise and submit progress report (9th – 24th March, 2007).

2.4   Carry out needs assessment exercise and submit progress report (9th – 24th March, 2007).

2.5   Record all the data captured in 2.1.3 and 2.1.4 above in the spreadsheet template and submit draft data (25th – 31st March, 2007).

2.6   Prepare draft interim findings and directory complete with list of contacts (31st March – 5th April, 2007).

2.7   Use Survey data analysis techniques on findings from all locations and prepare draft report (05th – 07th April, 2007).

2.8   Prepare a final report outlining the recommendations from the needs assessment (07th – 10th April, 2007).

3.0   SUMMARY OF FINDINGS

The survey on fabricators, retailers and repairers of machinery for rice production and processing has revealed a number of information about them, a summary of which is as follows:

➢   Many of the businesses in this sector are still small in terms of staff number, volume and value of activities.

➢   Many of the businesses have business operational problems that include inadequate business addresses, lack of telephone lines and not registered as a legal entity.

➢   Most of the businesses appreciate the importance of advertisement, but only few advertise probably because of cost involved.

➢ Most working spaces surveyed were of poor quality and need improvement for enhanced productivity and efficiency.

➢ Training opportunities is lacking in many of the organizations.

In conclusion, the businesses in this sector represent important players in the rice chain. A survey on them has revealed a number of issues on which positive intervention could result in improvement of the entire rice chain. In addition to issues highlighted by the survey, the respondents have catalogued their needs and problems in a prioritized manner. The needs were ranked with capital requirement as number one, need for modern equipment as number two and consistent and uninterrupted power supply as number three. Problems were also analyzed and the ranking was capital as number one, power supply number two and number three was availability of raw materials.

4.0   OUTLINE OF ACTIONABLE RECOMMENDATIONS

Ab initio, the major objective of the needs assessment exercise was to establish a picture of impediments, inefficiencies and opportunities that are experienced by these businesses so as to determine the support that may be provided to improve the productivity, efficiency and profitability of these businesses that are major stakeholders in the rice chain.

The picture has now been established and the following are actionable recommendations (implementation agency or organization indicated in bracket) whose implementation will undoubtedly result in improvement of all indexes desired by these businesses:

4.1   Policy Issues

4.1.1 Government at all levels should ease procedure of registering businesses. Charges should also be reduced to the barest minimum (possibly processing fee only) (Federal, State and Local Governments).

4.1.2 All policies on SMEs should be reviewed to make them more positive, favourable and implementable. Policies and Laws governing organizations charged with the responsibility of nurturing and creating conducive environment for SMEs should be reviewed to enable them function properly and proactively (Federal, State and Local Governments).

4.1.3 The Federal Government should further look at policy of liberalization (commercialization and privatization) of the power sector so as to make it more attractive to private participants (Federal Government).

4.1.4 The Central Bank of Nigeria in conjunction with Banks should enunciate favourable policies that could assist ameliorate financial problems faced by these businesses (Central Bank and commercial banks).

4.1.5 All tiers of government should make/review policies that encourage existence and proper functioning of business associations (Federal, State and Local Governments).

4.1.6 Most media organizations are owned by either State or Federal Government. As such these tiers of government should put in place an advertisement policy in favour of small scale businesses.

Highly subsidized advertisement tariffs should be part of the policy provisions (Federal and State Governments).

4.1.7 Government should review policies on training and re-training. The policy should contain provisions that make these training programmes very accessible to businesses in same category as those in this study (Federal and State Governments).

4.2 Implementation/Budgetary Issues

4.2.1 All tiers of government should make concerted and deliberate effort to name streets and number premises within the areas of their jurisdiction (Federal, State and Local Governments).

4.2.2 All concerned stakeholders should join hand to reduce telephone call charges to the barest minimum (GSM Operators, Fixed and Wireless Private Telecom Operators and National Telecommunication Commission [NCC]).

4.2.3 Handsets that use alternative energy sources i.e. solar, disposable batteries, etc should be identified and popularized in rural set-ups (GSM Operators, Private Investors, Associations, National Energy Commission).

4.2.4 Government should make sufficient budgetary provisions for ministries, agencies and parastatals charged with responsibility of any activity catalytic to growth of small and medium businesses. Such organizations include but not restricted to:

(i)   Technology Incubation Centers

(ii)   Industrial Training Centers

(iii)   Industrial Banks

(iv)   Industrial Training Fund

(v)   Federal Ministry of Science and Technology

(vi)   Ministries of Commerce and Industries

(Federal, State and Local Governments).

4.2.5   Governments to ensure adequate budgetary provision and faithful implementation of projects in the power sector and infrastructural development (Federal and State Governments).

4.2.6   State and Local Governments should create special markets i.e. for agricultural equipment and also make available all required infrastructure. (State and Local Governments).

4.2.7   State and Local Governments should fund and strengthen their extension units for the purpose of training and educating local fabricators on availability and usage of modern equipment (States and Local Governments).

4.2.8   Federal Government should expedite action on implementation of all policies related to privatization, commercialization, Presidential Initiatives related to Agriculture, Concessionary Credit regime for agriculture and manufacturing (Federal Government).

4.3   Support / Awareness Issues

4.3.1   Effort should be made to continuously educate and enlighten businesses on possibilities and options that exist (NGOs,

Associations, Development Institutions, Media Organizations and State Governments).

4.3.2 Training and Re-training on all activities involved in these businesses should be provided on a continuous basis. Trainings on improved fabrication procedures, book-keeping, marketing techniques, etc) (NGOs, Associations, Development Institutions and Relevant Government Organizations).

4.3.3 Create and Implement Capacity Building Initiatives for the businesses and their umbrella associations (NGOs, Development Institutions, Federal and State Governments).

4.4   Operational Issues

4.4.1 Financial Institutions should improve access to their activities especially as it relates small businesses. In addition, they should provide the small businesses with concessionary interest regime. (Central Bank of Nigeria, Commercial Banks).

4.4.2 The small businesses should make concerted and deliberate effort to improve on their working environment to reap the benefits therein. The businesses should be enlightened on benefits of these improvements (Businesses, NGOs, Development Organizations, Extension Organs and Media Organs).

Buffer Engineering and Management Consultancy Services
Kano Office, 17th April, 2007

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As stated in the introduction, eight (8) tasks were mapped out for implementation under this project. These tasks and their time lines are as follows:

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2.7 Use Survey data analysis techniques on findings from all locations and prepare draft report (05th – 07th April, 2007).

2.8 Prepare a final report outlining the recommendations from the needs assessment (07th – 10th April, 2007).

3.0 PROJECT IMPLEMENTATION

The eight tasks listed in section 2.0 were accomplished, as follows:

3.1 Task 1: Preparation of Work Plan

A work plan detailing how tasks will be accomplished and proposed timelines was prepared. List of tasks and their due dates, as proposed in the work plan, are as follows:

3.1.1 Prepare and submit a work plan giving a general outline of how tasks will be accomplished with proposed dates. **(Due date 05 March 2007).**

3.1.2   Review and finalize the basic data capture form and the needs assessment questionnaire. **(Due date 08 March 2007).**

3.1.3   Conduct a data gathering exercise and submit progress report. **(Due date 24 March 2007).**

3.1.4   Carry out needs assessment exercise and submit progress report. **(Due date 24 March 2007).**

3.1.5   Record all the data captured in 3 and 4 above in the spreadsheet template and submit draft data. **(Due date 31 March 2007).**

3.1.6   Prepare draft interim findings of work progress and field survey, and directory complete with list of contacts. **(Due date 05 April 2007).**

3.1.7   Compile findings from all locations and using survey data analysis techniques, prepare draft report. **(Due Date 07 April 2007).**

3.1.8   Prepare a final report outlining the recommendations from the needs assessment. **(Due date 10 April 2007).**

To avoid repetition, details of implementation procedure initially proposed (see report titled 'First Deliverable') are not repeated

here as it is same with actual implementation described in the following sections.

3.2   Task 2: Review of Data Capture Form and Needs Assessment Questionnaire; Training

This task is divided into two parts viz: Review and Training and were implemented as follows:

3.2.1   <u>Review</u>

The review was done in two stages. The first was desk study of the two instruments through the standard procedure of evaluating every question to ensure clarity and   avoid being ambiguous and suggestive. Interactions amongst the entire team after training provided the second opportunity for further fine-tuning of the survey instruments.

The various observations on the two survey instruments were as follows:

(a)   ***Data Capture Form***

General Comment(s)/Observation(s)

The general observation was DCF is adequate enough to achieve the first objective of producing a directory of individuals and organizations involved in   the   sale, fabrication, repair and servicing of machinery and machine parts.

Specific Comment(s)/Observations

The title of the DCF form is not sufficiently inclusive as it made no mention of the businesses and organizations that provide services in repair and maintenance. It is therefore suggested that the title be changed to "**Data Capture Form for Local Fabricators, Retailers and Repairers of Machinery and Machine Parts**".

Servicing and repair always go hand-in-hand. It is difficult to get an individual or organization that repairs that does not service and vice versa. Therefore, it is recommended that servicing option under Question 3 be changed to servicing/repairing.

(b)   *Needs Assessment Questionnaire for Local Fabricators*

General Comment(s)/Observation(s)

The instrument fairly addresses all issues that confront businesses in the categories mentioned above. However, it is suggested that a specific question on problems hindering their operations be asked. This aspect is included in Final Questionnaire as question nos. 48 and 49.

Some questions were more biased towards one group and appears irrelevant to others. For example Question 9: What is the monthly expenditure of this business on raw materials and inputs? This question is

more targeted to local fabricators than the other groups. To take care of similar questions, enumerators were instructed to slightly modify such questions to make it relevant to the other respondents.

Specific Comment(s)/Observations

Just like the DCF, it is recommended that the title should be "Needs Assessment Questionnaire for Local Fabricators, Retailers and Repairers".

Some questions were not phrased appropriately. All such questions were reworded.

All observations / corrections detailed above were then incorporated in the proposed final data capture form and Needs Assessment Questionnaire used in the survey work.

3.2.2. <u>Training:</u> Training of all Supervisors and Enumerators was conducted on 7th and 8th March, 2007. The training method adopted comprised the following steps:

Day One

Brief on Project: The trainees were given a general overview of the project including the two objectives of the survey project.

Explaining the Survey Instrument: Each question in both Data Capture Form and the Needs Assessment Questionnaire was explained to the trainees, with examples given where necessary. At the end of the explanation ample time was allowed for questions, comments and observations.

Demarcation of Survey Areas: With brief and explanation of survey instruments completed, trainees were requested to study and review proposed demarcation plan (contained in BEMCONS Technical Proposal). Interactions between trainees, using their knowledge of terrain and rice producing areas assisted in no small way in refining the initial demarcation plan. For example more local governments known to be high rice producing areas in Kano were added. Details on staff deployment and local governments covered are given in Annex A.

Day Two

Further Training: Trainees were divided into various groups with each group comprising the supervisor and his enumerators. The supervisor then serves as the instructor explaining and elucidating all questions in the two survey instruments.

Rehearsal by Enumerators: On completion of the further training exercise, the enumerators rehearsed administering the two survey instruments. In each group, enumerators

take turn to administer part of the instruments with their colleagues acting as respondents.

Strategy for Commencement: The training exercise came to a conclusion with each group drawing up an implementation strategy.

The training procedure adopted can be graphically represented as follows:

Day 1 {
- Presentation Giving an Overview of Project
- Explaining and Elucidating all Questions in the Two Survey Instruments
- A Session on Questions, Comments and Observations

Day 2 {
- Retraining on Survey Instruments by Supervisors
- Rehearsal by Enumerators
- Strategizing on Survey Implementation
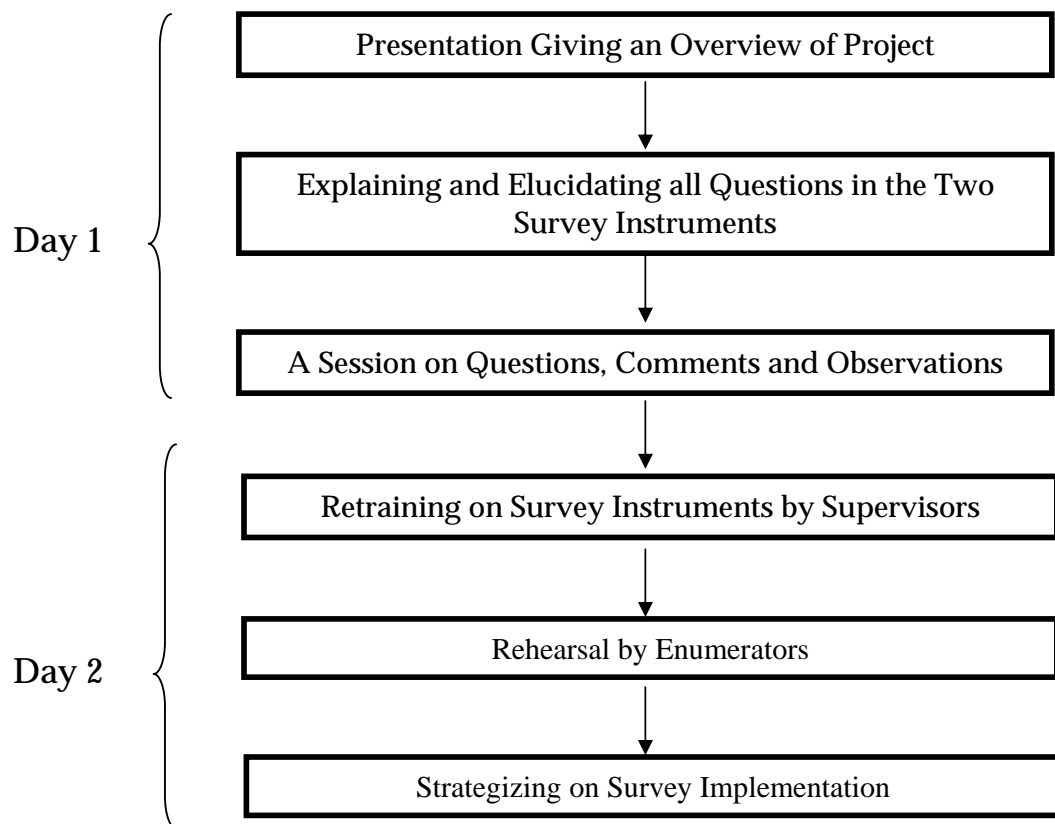
3.3   Task 3 and 4: *Field Work*

Upon completion of training, field work commenced on 9th March, 2007. The following activities relevant to data gathering exercise and needs assessment were accomplished:

3.3.1 *Deployment of Supervisors and Enumerators*: Supervisors and Enumerators were assigned areas of survey coverage. Deliberate effort was made to deploy personnel to areas well-known to them so as to take advantage of their knowledge on locations of local fabricators, retailers and repairers. Nine (9) Supervisors and forty eighty (48) Enumerators participated in the survey exercise.

3.3.2 *Pre-Survey Reconnaissance*: The first three days (i.e. 9th – 11th March, 2007) were used for reconnaissance survey to identify locations of would-be respondents. Simultaneously, contacts were made with Ministries of Commerce and Industries, Agricultural Development Projects, relevant associations to obtain information on where to locate local fabricators, retailers and repairers of machines for rice production and processing.

3.3.3 *Field Work:* Two main approaches were used during the field work: some enumerators administered both Data Capture Forms and Needs Assessment Questionnaires at same time, whilst others did only Data Capture Forms and identified willing contacts for the needs assessment as they progressed. They then administered the Needs Assessment Questionnaire thereafter.

3.4 Task 5: Data Entry into Spreadsheet Templates

3.4.1 *Collation of Filled Forms*

Upon commencement of field work, Supervisors worked closely with their Enumerators ensuring on daily basis that forms are filled properly and correctly. Filled forms are then checked by the Supervisors and where satisfied they then certify such forms and immediately forward same to the head office. On arrival at the head office, such forms are promptly checked to ensure correctness of all information. Where there are queries, this is promptly sent back to the concerned Supervisor. Where it is satisfactory it is then forwarded for entry into spreadsheet templates. Same procedure was adopted for all locations.

3.4.2 *Data Entry*

Numerous computers were deployed to facilitate data entry into spreadsheet templates. A total of eight hundred and ten (810) Data Capture Forms and one hundred and sixty eight Needs Assessment Questionnaires were received at the head office for entry into the spreadsheet templates.

3.4.3 *Data Cleaning*

Upon entry of all data, a team was constituted and charged with the responsibility of data cleaning. Procedure for data cleaning was fashioned out as follows:

- Check all entries for wrong spellings and incorrect entries;

- Check entries to ensure none is out of place i.e. figures in place of numbers and vice versa.

- Align all entries to ensure no contradictory entries.

Where any deficiencies are identified, effort was made for ratification. Where this was not possible the deficient form was referred back to the concerned supervisor or enumerator.

At the end of the data entry and cleaning exercises, Eight Hundred and One (801) entries were made in the data capture form spreadsheet template and One Hundred and Sixty Six (166) entries into Needs Assessment Spreadsheet template.

3.5   Task 6: Preparation of Interim Findings and Directories

3.5.1 *Interim Findings Report*

All findings from the survey comprising field observation/problems and interim results as revealed by study of data were compiled in a report titled, "Draft Interim Findings Report on Work Progress and Field Survey".

3.5.2 *Preparation of Directories*

Five types of directories, with all required details on all entries, were produced as follows:

- Directory comprising names of all local Fabricators, Retailers and Repairers arranged in alphabetical order.

- Directory comprising all the entities arranged on local government basis.

- Directory comprising only Local Fabricators arranged in alphabetical order.

- Directory comprising only Retailers arranged in alphabetical order.

- Directory comprising only Repairers arranged in alphabetical order.

The Directories were designed and produced using MS Access and later transferred to MS Word programme.

3.6 Task 7: Analysis of Data from All Locations

As earlier mentioned, data from all locations were collated, checked and entered into two spreadsheet templates. Entered data was cleaned and then survey data analysis was used to interpret data on various aspects that relate to the businesses and a report

was prepared entitled "*Draft Report on Findings from All Locations Using Survey Data Analysis Techniques*".

3.7   Task 8: Preparation of Final Report

This report is the Final Report and the last task (i.e. Task 8) under this   project. The report contains the following sections:

3.7.1 Introduction giving background information on the project (Section 1).

3.7.2 Description of tasks designed to achieve project objectives (Section 2).

3.7.3 Procedure adopted for implementation of the tasks (Section 3).

3.7.4 Findings and analyses using survey Data Analysis Techniques (Section 4).

3.7.5 Summary and Conclusion (Section 5).

3.7.6 Actionable recommendations arising from the needs assessment exercise (Section 6).

4.0   FINDINGS FROM ALL LOCATIONS

4.1   Business Operation

4.1.1 Physical Addresses

In the survey form, attempt was made to capture three types of descriptive addresses as follows:

(i) "Address 1" gives the shop number or house number.

(ii) "Address 2" gives the name of the road on which the shop or business is located.

(iii) "Address 3" contains any known landmark close to the business or company.

Table 1 below gives address types for businesses surveyed.

Table 1: Respondents' Address Types

S/No.	Address Type	Number of Companies	Percentage (%)
1	Companies with the three addresses	271	35
2	Companies with only address one and two	82	11
3	Companies with address two and three	230	29
4	Companies with only address three	81	10
5	Companies without any of the three except district and town	14	2

Companies in category 4 and 5 have inadequate addresses that might not easily take you to the intended location. The importance of exact addresses that easily leads prospective customers to businesses cannot be over-emphasized. To minimize above situation and promote economic activities, it is recommended that all tiers of government make concerted and deliberate effort to name streets and number premises within the areas of their jurisdiction.

4.1.2   <u>Business Telephone(s)</u>

Out of a total number of 781 respondents, 602 had no telephone. This represents 77% of the entire businesses surveyed. The fact that businesses categorized in Section 4.1.1 as having inadequate addresses also belong to the group without telephone lines makes the finding disturbing.

Taking cognizance of the fact that lack of electricity for charging phones (GSM handsets) is a problem in handling a phone even in the cities, it is recommended that in the interim associations should acquire and maintain lines on behalf of their members.

4.1.3   <u>Legal Status</u>

Majority of the businesses (87%) in all the categories surveyed (i.e. local fabricators, retailers and repairers) are not registered.

This lack of registration impacts negatively on these businesses in many ways:

(i) Non registration makes it difficult to access many forms of financial support.

(ii) They are not registered and therefore do not exist officially. Therefore, not considered in policy issues, donor support services, etc.

4.1.4 Business Size

The size of a business can be adjudged from many parameters i.e. number of employees, branch network and volume/value of daily activities. Table 2 gives statistics of employees in different businesses.

Table 2: Data on Employees

Employee Size Range	Number of Businesses within Range	Percentage
1 – 5	94	56
5 – 10	41	25
11 – 20	22	13
21 – 50	8	5
> 50	2	1

Of the 168 respondents that participated in needs assessment exercise, 109 have no branches, 14 have two branches, 7 have three branches, 2 with four branches, 3 with five branches and 1 each with seven and sixteen branches. The data also indicated that most of those with branches are retailers, whereby opening a new branch involves only renting a shop and commodities to stock in the shop.

An analysis of daily takings showed that 159 (95%) businesses have equal or less than ten thousand Naira (N10, 000.00) daily takings.

Above analysis shows that most of the business involved in this sector are small businesses that can be categorized as Small and Medium Enterprises (SMEs). The importance of SMEs in every economy, especially ours, cannot be over-emphasized. They undoubtedly form a veritable platform on which the economy of a country can be accentuated. The many advantages of SMEs include provision of jobs, availability of mid-skill manpower, survival of the middle class, etc.

From the above scenario, it logically follows that there is need for government to address constraints facing above class of businesses so as to facilitate their operations and promote their growth.

4.1.5   Business Location

For every business, proximity to market and services / infrastructure is very important.   Table 3 gives data on proximity of some essential requirements to the businesses.

Table 3: Proximity of Businesses to Clients and Services

Proximity (1: Far – 5: Near)	Clients/ Market	Spare Parts Suppliers	Fuel Supply	National Electricity Supply	Water Supply
1	42	47	16	29	20
2	13	9	9	9	2
3	29	20	3	8	4
4	8	20	12	8	9
5	64	57	84	84	77

Above data indicate that most of the businesses are close to their clients/markets and other requirements, a condition which is very healthy for the businesses.   Combination of closeness to market and infrastructure and other services make the cost of business cheaper thereby making the business competitive.

In this regard, the concept of incubation centers and technology villages as promoted by Federal Ministry of Science and Technology and Creation of specific locations for certain businesses by state governments are a welcome development.

4.1.6   Power Availability and Consumption

Table 4 gives expenditure pattern on energy used by these businesses.

Table 4: Expenditure Pattern on Energy

Energy Source	Total Energy Cost	Percentage (%)
National Electricity	769,890	13
Alternative Electricity	408,120	7
Generators	1,792,100	31
Firewood	208,610	4
Kerosene	462,400	8
Charcoal	2,030,300	35
Gas	72,000	1
	5,743,420	

From the above table 66% of energy used by these businesses is sourced from generators and charcoal. This scenario, where only 13% is sourced from national electricity, is not encouraging.

This fact reduces competitiveness of our businesses in the global arena. In this era of globalization, the implication of using generators and bio-energy is better imagined. In this regard, the plan by government to liberalize the power sector through commercialization and privatization is a welcome development.   Effort   at   reaching   10,000   megawatts

generation by end of 2007 is also a move in the right direction.

Further study of energy usage pattern shows that usage of firewood and charcoal amongst our blacksmith is a common place practice. This choice of energy could either be as a result of non-availability of electricity or lack of fabricating equipment that utilize electricity as energy source. There is no doubt that smelting, blowing and heating equipment that use electricity has lower running costs. Apart from this advantage, use of firewood and charcoal aggravates deforestation.

4.2   Financial Services

4.2.1 Perception and Accessibility

Most respondents (95%) appreciate the value or importance of financial and banking services. All across, even by small businesses in rural areas, the comment on the financial sector was very good. Most that do not patronize formal banking sector enjoy financial support services rendered by the informal financial outfits (*adashi*).

The only complaints about financial sector, as mentioned by some respondents, were inaccessibility and stringent conditions when requesting for financial support. Recent consolidation of banks provides a good opportunity to banks

to properly look at the real sector of the economy and offer them support towards sustainable growth.

4.2.2 Seasonality of Income

Table 5 below gives total earning for each month for all companies studied under needs assessment.

Table 5: Total Earnings/Volume for each Month

Month	Total Earnings for all Business Surveyed	Total Volume of Products Marketed
January	442,514,000	22,051
February	415,912,417	23,628
March	349,465,598	25,379
April	282,875,938	2,038,638
May	174,374,134	1,550,571
June	188,206,999	1,545,895
July	194,651,274	3,036,561
August	201,333,644	535,101
September	574,909,624	527,675
October	630,922,640	530,157
November	639,008,193	28,341
December	675,357,295	38,603

The data shows that total earning from October to March is more or less same and then it decreases to less than 50% thereafter from the months of April, May, June, July and August.

On the other hand, the volume of assorted products increased many folds in April through July and then dropped dramatically thereafter. The plausible explanation to these opposite scenarios between value and volume is that the high volume of products sold during the month April to August consists of hand tools (hoe, sickle, knife, etc) whose cost is comparatively low. On the other hand, products purchased off season (i.e. tractors, threshers, hullers, etc) have comparatively very high unit rates. Thus even though their unit number is low, their cost is however very high. For example, the value of one tractor equals value of thousands of a hoe.

Above table shows that for all the businesses, there is effect of season. Processing equipment and heavy land preparation equipment are sold and repaired more between September and March, while hand tools attract more patronage during the months April through August.

4.3   Business Associations

Most respondents (over 90%) commented positively on the role of associations to their businesses. Even the few that expressed reservations did not condemn associations but complained on leadership styles. The respondents stressed the importance of associations by listing the various benefits they enjoy from their different associations. The benefits include:

(i)   Financial support.

(ii)   Facilitation of market linkages.

(iii)   Providing new ideas/designs for making new machines.

(iv)   Provision of loan packages.

(v)   Facilitates cooperation between members.

(vi)   Looks after welfare of members.

(vii)   Arrange trainings to improve skill of members.

(viii) Protects the business.

(ix)   Regulates charges for services e.g. milling charges.

(x)   Protects interests of members.

(xi)   Provides inputs required by the members at subsidized or competitive rates.

(xii)   Assists in advertisement and marketing.

(xiii) Provides beneficial information to members.

These findings and the quest to make associations more functional encouraged visits to many associations. Detail findings on associations are presented in Annex D.

4.4   Advertisement

Of the 168 respondents of the needs assessment exercise, 112 (67%) had a good perception of advertisement. No respondent described advertisement as bad. However, many did not respond to the

question. Table 6 gives a ranking of the various methods used for advertisement by the respondents.

Table 6: Ranking of Advertisement Types

Type	Number of Respondents	Ranking
Showroom	20	2
Bill Board	18	3
Television	10	5
Radio	10	5
Flyers	7	6
Trade Fair	20	2
Exhibitions	13	4
Display at Workshop	22	1
Business Card	18	3

Display in workshop ranks first among methods used by respondents surveyed. This is followed by use of showroom. Choice of these methods might not be unconnected with the low additional cost incurred.

Expenditure pattern for sixty respondents that spent money on advertisement is given in Table 7.

Table 7: Expenditure Pattern of Respondents

Expenditure Range (N)	Number of Respondents (Out of 60)	Percentage (%)
1,000 - 5,000	25	42

6,000 - 10,000	10	17
11,000 – 50,000	16	27
60,000 - 100,000	5	8
110,000 - 200,000	2	3
> 200,000	2	3

From the above table, only 25 businesses out of 168 spent above N10,000 per annum on advertisement. This is in spite of the general acknowledgement of its importance to volume of business. One possible reason for this situation is low financial position of most of these businesses. Pending when the businesses grow to a comfortable financial level, it is recommended as an interim measure that government should put in place an advertisement policy in favour of small scale businesses. Highly subsidized advertisement tariffs for some segregated businesses, especially small and medium types should be part of the policy provisions. Various initiatives, especially by NGOs, should be encouraged. In this regard, the plan by ProPcom to produce a directory of fabricators, retailers and repairers, which is a potent advertisement, for distribution amongst stakeholders is a major step in the right direction.

4.5   Client Information

The importance of a customer to the success of any business cannot be over emphasized. A business can be described as a chain of activities (buying, processing, selling, etc) in which a number of people (raw materials providers, customers, etc) play a complementary role. A good businessman is continuously

conscious about the source of his raw materials, where he obtains requisite services and the market ⁄ client through which he disposes his wares.

The respondents have different classes of clients depending on products and location of the business (urban or rural). Examples of product types and clientele are given in Table 8.

Table 8: Products Type and Clientele

Business Group	Name of Business	Product / Services	No of Client by Type
Local Fabricators	Adamu Ibrahim Baban Jaku	Big Hoe Small Hoe	162 Males 28 Females
Local Fabricators	Alhaji Sani Bawa (Sarkin Noma)	Plough Harrow Sickle Knife Cutlass	60 Males 40 Females 30 Micro Entreprises 4 Medium Entreprises 4 Large Entreprises 5 NGOs
Retailers	Mal. Shu'aibu Liman	Sieve Hopper Bearing Housing Dehullers	365 Males 80 Females 1 Large Enterprises
Retailers	Adamu Ibrahim Baban Jaku	Animal Drawn Ridger Cultivator Hand Ridger Sickle Big Hoe Small Hoe	162 Males 28 Females
Repairer	Ilimi Technical Workshop	Rice Milling Machine Groundnut Milling Machine Corn Machine Huller	10 Males

As could be seen from examples in above table, the client type is mixed depending on business and products marketed. It is important to note that in every business all client types are

important and every effort should be made by a business to sustain business relationship.

For most respondents, nature of transactions with clients was on cash basis. Different reasons were advanced by different respondents as follows:

o Low capital which does not allow advancing credit.
o Default by some customers in paying past transactions.

4.6 Staff Information

The quality of staff in terms of educational qualification and skill level impacts positively on performance of a business (i.e. productivity, efficiency, competitiveness, etc). The table below gives statistics on organizations as relates staff training.

Table 9: Staff Training Provision

Training Provision	Number of Organizations (Out of 167)	Percentage (%)
Provision for Staff Training (time)	62	37
Provision for Staff Training (Money)	21	13
Business Management Training	9	5
Training on HIV/AIDS	20	12

The above data shows that most of the organizations do not have provision for training their staff. The importance of training and re-training cannot be over emphasized in every organization. In a dynamic world, where changes and advances are taking place everyday, the workforce cannot and should not remain static without training and re-training. Most businesses and organizations recognized this fact, but are unable to put effect to it. This is probably because training and re-training is not cheap, especially in technological fields. Taking due cognizance of this fact, there is need for government and willing non-governmental organizations to assist in this direction. The concept of Industrial Training Centers under Federal Ministry of Industries should be sustained and expanded to provide more opportunities.

4.7 Working Conditions

A good working environment is desirable for every type of work and undoubtedly impacts on output and quality. Table 10 below gives finding on work environment of respondents of the needs assessment exercise.

Table 10: Condition of Work Space

Condition of Work Space	Number of Businesses	Percentage (%)
Excellent	0	0
Very Good	3	2
Good	15	9
Fair	63	38

Poor	46	28
Very Poor	34	20

From above table, the survey found that most working environments (i.e. 48%) were unsuitable. Only 2% of work spaces surveyed were found very good and 9% good. There is no gainsaying the fact that owners of businesses should do more to improve their working environment. Such efforts yield positive dividends beyond expenditure incurred. Many studies abound that show deleterious effect of unconducive working conditions. Negative effects of heat, dust, cramped work conditions, poor lighting, high humidity, etc have all been demonstrated through many studies. One study showed a decline of work output by up to 50% due to poor working conditions.

4.8   Needs and Problems

The last two questions in the needs assessment questionnaire sought to find out needs and problems of the respondents in a prioritized manner. For both needs and problems, response of the respondents was statistically analyzed and ranked. Summary of the results is given in Table 11 for needs and Table 12 for problems.

Table 11: Needs Assessment of Respondents

Type of Need	Number of Businesses	Ranking
Needs for modern equipment	42	2
Assistance in Advertising Product	1	7
Capital	80	1
More Customers	1	7
Cheaper and quality Raw Material	7	4
Training	3	6
Spare Parts	6	5
Improved Market	1	7
Power Supply	19	3
Transportation	1	7
Enabling Government Policy	1	7

In Table 11, eleven different needs were mentioned out of which capital need was ranked number one, followed by need for modern equipment. The next need by ranking was power supply.

Table 12: Statistical Analysis of Problems Faced by Respondents

Type of Problem	Number of Businesses	Ranking
Equipment /Working Environment	10	5
Technical Skills / Training	3	7
Power Supply	37	2
Raw materials	19	3
Capital	63	1
Double Taxation	4	6
Cost of Transportation	11	4
Market	10	5
Organization / Standardization	3	7
Water	2	8

Table 12 gives ten different problems mentioned by the respondents. Statistical analysis shows that capital problem ranks number one, followed by power supply as number two and the third ranking problem is raw materials availability.

5.0   SUMMARY AND CONCLUSION

The survey on fabricators, retailers and repairers of machinery for rice production and processing has revealed a number of information about them, a summary of which is as follows:

➢   Many of the businesses in this sector are still small in terms of staff number, volume and value of activities.

➢   Many of the businesses have business operational problems that include inadequate business addresses, lack of telephone lines and not registered as a legal entity.

➢   Most of the businesses appreciate the importance of advertisement, but only few advertise probably because of cost involved.

➢   Most working spaces surveyed were of poor quality and need improvement for enhanced productivity and efficiency.

➢   Training opportunities is lacking in many of the organizations.

In conclusion, the businesses in this sector represent important players in the rice chain. A survey on them has revealed a number

of issues on which positive intervention could result in improvement of the entire rice chain. In addition to issues highlighted by the survey, the respondents have catalogued their needs and problems in a prioritized manner. The needs were ranked with capital requirement as number one, need for modern equipment as number two and consistent and uninterrupted power supply as number three. Problems were also analyzed and the ranking was capital as number one, power supply number two and number three was availability of raw materials.

6.0   OUTLINE OF ACTIONABLE RECOMMENDATIONS

Ab initio, the major objective of the needs assessment exercise was to establish a picture of impediments, inefficiencies and opportunities that are experienced by these businesses so as to determine the support that may be provided to improve the productivity, efficiency and profitability of these businesses that are major stakeholders in the rice chain.

The picture has now been established and the following are actionable recommendations (implementation agency or organization indicated in bracket) whose implementation will undoubtedly result in improvement of all indexes desired by these businesses:

6.1 Policy Issues

6.1.1   Government at all levels should ease procedure of registering businesses. Charges should also be reduced to the barest minimum (possibly processing fee only) (Federal, State and Local Governments).

6.1.2   All policies on SMEs should be reviewed to make them more positive, favourable and implementable. Policies and Laws governing organizations charged with the responsibility of nurturing and creating conducive environment for SMEs should be reviewed to enable them function properly and proactively (Federal, State and Local Governments).

6.1.3   The Federal Govt. should further look at policy of liberalization (commercialization and privatization) of the power sector so as to make it more attractive to private participants (Federal Government).

6.1.4   The Central Bank of Nigeria in conjunction with Banks should enunciate favourable policies that could assist ameliorate financial problems faced by these businesses (Central Bank and commercial banks).

6.1.5   All tiers of government should make/review policies that encourage existence and proper functioning of business associations (Federal, State and Local Governments).

6.1.6   Most media organizations are owned by either State or Federal Government. As such these tiers of government should put in place an advertisement policy in favour of small scale businesses. Highly subsidized advertisement tariffs should be part of the policy provisions (Federal and State Governments).

6.1.7   Government should review policies on training and re-training. The policy should contain provisions that make these training programmes very accessible to businesses in same category as those in this study (Federal and State Governments).

6.2   Implementation/Budgetary Issues

6.2.1   All tiers of government should make concerted and deliberate effort to name streets and number premises within their areas of jurisdiction (Federal, State and Local Governments).

6.2.2   All concerned stakeholders should join hand to reduce telephone call charges to the barest minimum (GSM Operators, Fixed and Wireless Private Telecom Operators and National Telecommunication Commission [NCC]).

6.2.3   Handsets that use alternative energy sources i.e. solar, disposable batteries, etc should be identified and

popularized in rural set-ups (GSM Operators, Private Investors, Associations, National Energy Commission).

6.2.4   Government should make sufficient budgetary provisions for ministries, agencies and parastatals charged with responsibility of any activity catalytic to growth of small and medium businesses. Such organizations include but not restricted to:

(vii)   Technology Incubation Centers

(viii) Industrial Training Centers

(ix)   Industrial Banks

(x)   Industrial Training Fund

(xi)   Federal Ministry of Science and Technology

(xii)   Ministries of Commerce and Industries

(Federal, State and Local Governments).

6.2.5   Governments to ensure adequate budgetary provision and faithful implementation of projects in the power sector and infrastructural development (Federal and State Governments).

6.2.6   State and Local Governments should create special markets i.e. for agricultural equipment and also make available all required infrastructure. (State and Local Governments).

6.2.7   State and Local Governments should fund and strengthen their extension units for the purpose of training and educating local fabricators on availability and usage of modern equipment (States and Local Governments).

6.2.8   Federal Government should expedite action on implementation of all policies related to privatization, commercialization, Presidential Initiatives related to Agriculture, Concessionary Credit regime for agriculture and manufacturing (Federal Government).

6.3   Support / Awareness Issues

6.3.1   Effort should be made to continuously educate and enlighten businesses on possibilities and options that exist (NGOs, Associations, Development Institutions, Media Organizations and State Governments).

6.3.2   Training and Re-training on all activities involved in these businesses should be provided on a continuous basis. Trainings on improved fabrication procedures, book-keeping, marketing techniques, etc) (NGOs, Associations, Development Institutions and Relevant Government Organizations).

6.3.3   Create and Implement Capacity Building Initiatives for the businesses and their umbrella associations (NGOs, Development Institutions, Federal and State Governments).

6.4 Operational Issues

6.4.1 Financial Institutions should improve access to their activities especially as it relates small businesses. In addition, they should provide the small businesses with concessionary interest regime. (Central Bank of Nigeria, Commercial Banks).

6.4.2 The small businesses should make concerted and deliberate effort to improve on their working environments to reap the benefits therein. The businesses should be enlightened on benefits of these improvements (Businesses, NGOs, Development Organizations, Extension Organs and Media Organs).

**Buffer Engineering and Management Consultancy Services
Kano Office, 17th April, 2007**

ANNEX A

SURVEY OF LOCAL FABRICATORS, RETAILERS AND REPAIRERS OF RICE PRODUCTION AND PROCESSING MACHINES

LIST OF STAFF

Town	Local Govt. Area	Supervisor	Enumerator
Kano	1. Dala 2. Gwale 3. Bichi 4. Dambatta 5. Dawakin Tofa	Engr. Rabiu Falalu	1. Nurudeen Mohd Rabiu 2. Bala Dan'Azumi 3. Sagir Ibrahim 4. Hassan Abdullahi 5. Ibrahim Malami 6. Abubakar Aliyu
	1. Nasarawa 2. Fagge 3. D/Kudu 4. Bunkure 5. Garko	Engr. Mohammed Shuaibu Abubakar	1. Sule Shitu 2. Zahraddeen Sale 3. Abubakar Ibrahim 4. Abdurahim Ibrahim 5. Abdullahi Mohd

			6. Ali Ibrahim
	1. Municipal Area Council 2. Tarauni 3. Kura 4. G/Malam 5. Tudun Wada 6. Kumbotso	Engr. Nalado Dauda	1. Haruna Adamu 2. Mani Mohd Gwarzo 3. Balarabe Wudilawa 4. Abdullahi Nura Isa 5. Nura Ibrahim 6. Aminu Haruna
Zaria	1. Zaria 2. Soba	Dr. U. S. Mohammed	1. Yusuf Babale 2. Idris A. Abubakar 3. Mohammed P. Buba 4. Abubakar Tanimu 5. Yakubu Umar
	1. Makarfi 2. Hunkuyi	Engr. Mohd Abubakar	1. Ahmad Buba Ishak 2. Abdullahi Sani 3. Rabiu N. Mohammed 4. Alh. Sani Inusa 5. Abdu Tela
	1. Sabon Gari 2. Giwa	Mal. Adamu Maje	1. Mr. Bulus Pam 2. Aminu Balarabe 3. Mohammed Ibrahim 4. Sani Umar Yusuf 5. Ahmed Aliyu
Kaduna	1. Kaduna South 2. Chikun 3. Kagarko	Engr. Aminu Fagge	1. Abdulmalik Bosso 2. Yusuf Abdullahi 3. Umar Yusuf Abdullahi 4. Muhammad Abdullahi 5. Yusuf Tukur
	1. Kajuru 2. Lere 3. Kauru	Engr. Sani Isyaku	1. Muhammad S. Liman 2. Sani T. Umar 3. Aliyu Muhammad 4. Sanusi U. Muhammad 5. Muslim A. Khalid
	1. Kaduna 2. North 3. Igabi 4. Birnin Gwari	Engr. Atanda Mohd	1. Abubakar S. Usman 2. Usman A. Garba 3. Hassan Muhammad 4. Aminu Abdullahi 5. Shamsu Aliyu Umar

ANNEX B

SURVEY OF LOCAL FABRICATORS, RETAILERS AND REPAIRERS OF
RICE PRODUCTION AND PROCESSING MACHINES

ASSOCIATIONS IDENTIFIED

1. Association for Tractor Repairers, Sales and Service (AFOTRASS) No. 6, Maikalwa, Naibawa, Zaria Road, Kano.

2. Kano State Grinding Machines and Spare Parts Sellers Association, No. 701, Court Road, Sabon Gari Market, Kano.

3. Rice Milling Machine Repairers Association, Kura Town by First Filling Station.

4. Kungiyar Makeran Asali, U/ Makera Town, Gezawa Local Government, Kano.

5. Griding and Rice millers Association, 10A Samaru Road, Basawa, Sabon Gari Local Government Area, Kaduna State

6. Gindi Rimi Association, (Reconditioners of Rice Mill drums and shafts) 32 Sokoto Road, (Near Total Filling Station by overhead Bridge) Kwangila/Hanwa, Sabon Gari Local Government Area, Kaduna State.

7. Kungiyar Taimakon Kai da Kai na Masu Aiki da Sana,ar Shinkafa c/o Mal. Kur Adamu Doka Kasuwar Doka, Doka, Kudan Local Government, Hunkuyi, Kaduna State.

8. Fadama Farmers Association, c/o Hassan Hussaini, Bakin Kasuwa, Tudun Saibu, Maigana, Soba Local Government Area, Kaduna State.

9. Mal. Magaji Tanko, Coordinator for Registration of Groups (farmers, self-help, etc) , Kaduna Agricultural Development Project, Maigana ADP Zonal Office, Maigana, Soba Local Government Area, Kaduna State.

10. Rice Farmers Association, c/o Maigarin Kwanan Manu, Kwanar Manu Village, near Basawa, Sabon Gari Local Government Area, Kaduna State.

11. Kaduna State Blacksmith Association. T.1 Zaria Road, Kawo Bus Stop, Kaduna. 08058274913.

12. Association of Milling and Grinding Machines Repairers, No. 28 Kawo Road, Kaduna. 08065309596.

13. Amil Industries Ltd. No. 125/129 Sabon Birni Road, Kawo New Ext. Kaduna. 062-312330, 319512, 08037878303.

ANNEX C

SURVEY OF LOCAL FABRICATORS, RETAILERS AND REPAIRERS OF
RICE PRODUCTION AND PROCESSING MACHINES

LIST OF ORGANIZATIONS

1.   River Basin Development Authorities

2.   State Agricultural Development Projects

3.   State Ministries of Agriculture

4.   States' Agricultural Supply Company

ANNEX D

SURVEY OF LOCAL FABRICATORS, RETAILERS AND REPAIRERS OF
RICE PRODUCTION AND PROCESSING MACHINES

VISITS TO ASSOCIATIONS

Associations are usually formed for many reasons and their importance (if functional) cannot be over emphasized. Due recognition of their vital role was one of the main reasons for interacting with identified associations, using the following points as a discussion guide:

(i)   Their goals and objectives.

(ii)   How they relate with their members and what they do for them.

(iii)   Do they have any capacity building requirements (i.e. advocacy requirements, trainings, organizational logistics)?

(iv)   Do they have women members? If yes, what proportion? If no why?

(v)   Do the associations have any programme (enlightenment, assistance, counseling, etc) as relates HIV, Environment, Malaria and other diseases.

(vi)   Any other comment from them.

A comprehensive list of associations visited in Kano, Zaria and Kaduna are listed in Annex B

Responses to some of the issues in the above guide were similar from one association to another and from avoidance of duplication highlights from all associations are listed below:

(ii)   Goals and Objectives

- To upgrade the standard of the profession.

- To foster cooperation among members.

- To assist members in times of need (disaster, ceremony, etc).

- To promote unity, progress of members and development of their trade.

- To improve relationship between their association and other associations, government agencies and society at large.

- To encourage youth to be self-reliant.

- To create and provide opportunities for members and employment for the society at large.

- To help train students on industrial training.

(iii)   Activities to Ensure Interaction between Members

o Quarterly meetings

o Participation in exhibition, trade fairs and workshops/ seminars / conferences.

o Periodic communication through mobile phone.

(iv)   Services Rendered by Associations to Members

▪ Financial assistance to members when the need arises.

(v)   <u>Capacity Building Requirements</u>

❖ Require training and organizational logistics.

(vi)   <u>Women Membership</u>

A number of the associations have no women membership. This situation is not out of discrimination, but mostly as a result of the arduous nature of the business (except retailing). However, one association (Kaduna State Association of Millers, Fabricators and Repairs of Milling and Grinding Machines) had up to 40% women membership.

(vii)   <u>Enlightenment Programmes</u>

➢ Some associations do enlighten their members on varied issues like polio eradication, bird flu pandemic, rights as a citizen, etc.

➢ Some associations sponsor its members to attend seminars and workshops on HIV/AIDS.

(viii) <u>Needs and Problems</u>

✓ Improved access to raw materials
✓ Need modern equipment
✓ Lack of adequate capital
✓ Poor electricity supply
✓ Non recognition / assistance to association