



ROOT AND TUBER IMPROVEMENT AND MARKETING
PROGRAMME (RTIMP)



Draft Report

on

**SELECTION OF FIRST FOUR RTIMP GPCS IN
TANO NORTH, TECHIMAN, WEST GONJA
AND SEKYERE WEST DISTRICTS**

BY

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EXECUTIVE SUMMARY

The report is a compressed account of processed field data collected on seventeen (17) cassava processing centres selected in four (4) districts in three of the ten regions of Ghana namely Tano North and Techiman districts in the Brong Ahafo region, West Gonja district in the Northern region and Sekyere West district in the Ashanti region. The purpose of the survey was to select appropriate cassava processing centres for upgrading and adoption as RTIMP Good Practices Centres (GPCs).

Maximum use was made of the criteria spelt out in the RTIMP Implementation Manual. The thirteen (13) factors identified were regrouped into ten (10) and given weights as to their relative importance to the GPC scheme. The visited processing centres were critically and objectively examined and scored by the investigating team on each of the 10 weighted factors. The centre with the highest number of points was chosen and recommended for upgrading to GPC in each district.

The four (4) centres accordingly selected in the four districts are:

- Bredi Agric Enterprise - Tano North, Brong Ahafo
- Aworowa Coop Cassava Proc. & Marketing Society - Techiman, Brong Ahafo
- Kanyitiwale II Processing Group - West Gonja, Northern
- Josma Agric. Industry Ltd - Sekyere West, Ashanti

With the exception of Bredi Agric. Enterprise and to some extent Josma Agric. Industry Ltd, a lot is required to improve on hygiene and environmental cleanliness of the selected processing plants. Some additional equipment, civil works and packaging facilities will also be required to bring up these enterprises to the relevant standard.

The team recommends that the implementer of the upgrading exercise be further tasked to produce detailed layout of the centres before and after the RTIMP intervention.

TABLE OF CONTENT

	Page
Executive Summary	i
Table of Content	ii
List of Abbreviations	iii
1.0 INTRODUCTION	1
2.0 INVESTIGATION TEAM	1
3.0 DISTRICTS AND PROCESSING ENTERPRISES SURVEYED	2
4.0 PROCEDURE FOR SELECTION OF PROCESSING ENTERPRISES FOR UPGRADING TO GPCs	3
5.0 SUMMARY OF SURVEY RESULTS	5
6.0 ANALYSIS OF FINDINGS	10
7.0 CONCLUSION AND RECOMMENDATIONS	21
8.0 APPENDIX	24

LIST OF ABBREVIATIONS

CSIR	Council for Scientific and Industrial Research
FRI	Food Research Institute
GPC	Good Practice Centre
GRATIS	Ghana Regional Appropriate Technology Industrial Service
IFAD	International Fund for Agricultural Development
MOFA	Ministry of Food and Agriculture
PCO	Programme Coordinating Office
RTIMP	Root and Tuber Improvement and Marketing Programme

1.0 INTRODUCTION

The Root and Tuber Improvement and Marketing Programme (RTIMP), which is an eight-year programme, became effective on November 8, 2006. The overall goal of the RTIMP is ‘to enhance incomes and food security to improve livelihoods of the rural people in Ghana’.

The Programme’s three operational components arising both from the specific purposes and the guiding principles for implementation are: (i) support to increased commodity chain linkages; (ii) support to R&T crop production; and (iii) upgrading of technologies and skills within R&T commodity chains. Under the third component, the RTIMP plans to establish a network of 15 Good Practices Centres (GPCs) in the country as demonstration centres where small-scale R&T entrepreneurs can see for themselves how advantageous it would be for them to invest in improved equipment and practices. The 2007 annual work plan of RTIMP requires four processing sites to be selected for upgrading into GPCs.

Experience shows that small-scale producers can improve their businesses markedly after "seeing" how their peers are running their businesses, in terms both of ‘hardware’ (e.g. structures, layout and equipment) and ‘software’ (e.g. management, marketing, production planning, customer relations, etc.). Some high-performing R&T processing businesses exist and others are likely to appear as a result of transfer of relevant processing technologies.

In view of this, the Programme Coordinating Office (PCO), drew up a programme and invited two Implementing Partners (Food Research Institute and GRATIS Foundation) to carry out a survey on some selected processing enterprises for assessment and upgrading into GPCs.

2.0 INVESTIGATION TEAM

A three-member team undertook the survey and was made up with the following:

1. Mr. Sheini M. Abu-Bakar from GRATIS Foundation, Tema.
2. Dr. Nanam Tay Dziedzoave from Food Research Institute, Accra, and
3. Mr. Vincent C Akoto from RTIMP PCO, Kumasi

3.0 DISTRICTS AND PROCESSING ENTERPRISES VISITED

NO	DISTRICT	NAME OF ENTERPRISE	LOCATION
1	TANO NORTH	<ol style="list-style-type: none"> 1. Adwenepa Cassava Farmers and Gari Processing Association 2. Bredi Agricultural Enterprise 3. Biakoye Cassava Processing Group 4. Nyame Akwan Processing Centre 	<ol style="list-style-type: none"> 1. Bomaa Apesika 2. Bredi 3. Adroba 4. Koforidua, Duayaw Nkwanta
2	TECHIMAN	<ol style="list-style-type: none"> 1. Papaso Aba Processing Group 2. Aworuwa Co-operative Cassava Processing and Marketing Society 3. Christian Mothers Association Gari Factory 4. Manase Foods 5. Hansua Women Gari Society 	<ol style="list-style-type: none"> 1. Hansua, Techiman 2. Aworuwa, Techiman 3. Akrofuom, 4. Jama Temponim 5. Hansua, Techiman
3	WEST GONJAH	<ol style="list-style-type: none"> 1. Kanyitiwale (I) OIC Processing Group 2. Kanyitiwale (II) Processing Group 3. Anwerinkani Processing Group 4. Samakuse Gari Processing Group 	<ol style="list-style-type: none"> 1. Lagbonto, Damongo 2. Alhassan Kura, Damongo 3. Agric settlement, Damongo 4. Canteen, Damongo
4	SEKYERE WEST	<ol style="list-style-type: none"> 1. Yonso Cassava Processing Factory 2. Josma Enterprises 3. Dukukrom Gari Processing Enterprise 4. Ricky Osei 	<ol style="list-style-type: none"> 1. Yonso 2. Woraso 3. Adidwam 4. Bobin

4.0 PROCEDURE FOR SELECTION OF PROCESSING ENTERPRISES FOR UPGRADING INTO GPCs

4.1 Selection Criteria

Generally, the main criterion used for the selection of the sites was that the district must be in a major root and tuber growing area. This criterion was used in determining the districts to be surveyed. For the selection of the specific processing centres for upgrading into GPCs, the following criteria were adopted.

- Must be a commercially viable enterprise and have competitive advantage where necessary.
- Must have the initial basic equipment in use and potential to be sufficiently resourced in terms of equipment and machines.
- Must have adequate structure and space for expansion
- Must have adequate utilities (water, electricity, etc) or possibility for installing these facilities
- Willingness to participate as a demonstration centre
- Must be amenable to training
- Must be an Entrepreneur or Key worker in the enterprise and must have basic education (JSS level)
- Location must be accessible and suitable for good hygienic practices
- Must be situated within vicinity of accommodation facility(ies) to host visitors
- Proprietor must demonstrate ownership of the land or titles
- Must have operated profitability for a minimum of one year
- Must have the potential for providing a well structured management system

4.2 Scoring System

The implementation manual has identified about 13 criteria or factors for selecting a processing unit for upgrading into a GPC in the districts. These have been regrouped and arranged into 10 as in the accompanying tables. Using the ten (10) criteria a points scoring system was developed as follows to assess each of the processing centres surveyed in comparison to their counterparts within each district.

4.1.1 Weighted Averages:

The ten (10) factors/criteria were examined and assigned weights according to their relative importance. Hundred (100) points are distributed between the 10 criteria – the most important factor taking the highest number of points.

4.1.2 Scores:

Each of the 4 processing units in the district was examined critically and objectively using in turn all of the 10 factors. The processing units were scored on each criterion by allocating 1,2,3,4 or 5 points against the factor – 1 being the lowest, and 5 the highest score on the factor – depending on the extent to which each satisfied the particular criterion. The total points scored for each factor was obtained by multiplying its weighted average by the corresponding score and the results per processing unit added up.

The processing unit with the highest points was selected for the GPC- baring any future development to the contrary.

5.0 BRIEF DESCRIPTION OF PROCESSING CENTERS SURVEYED

It would be unwieldy to describe in detail each of the seventeen processing centres surveyed, due to the high number and similarities in their operations, and the tendency to be repetitive. To make reading simple and for effective presentation each centre has been represented graphically and some key information on each processing centre such as the location, the group size, weekly output, contact details etc., have been summarized below.

5.1 TANO NORH DISTRICT CASSAVA PROCESSING SITES (SUMMARY OF FINDINGS)

5.1.1 BIAKOYE CASSAVA PROCESSING GROUP, ADROBAA



Manager: Nana Adwoa Badu
Contact Details: NIL
Number of Employees/Members: 10
Major Equipment Available: Grater [IITA Design], Double Screw Press, Gari Sifter.
Major Product: Gari
Current Production Scale: 227 olonka/wk
Water Source: Bore Hole
Energy Source: Petrol **Land Size:** 0.2 Acres

5.1.2 NYAME AKWAN PROCESSING CENTER, KOFORIDUA-DUAYAW NKWANTA



Manager: Rose Boahemaa
Contact Details: 249854043
Number of Employees/Members: 50
Major Equipment Available: Grater [IITA Design], Double Screw Press, Gari Sifter.
Major Product: Gari
Current Production Scale: 400 olonka/wk.
Water Source: Bore Hole
Energy Source: Petrol/Electricity **Land Size:** 0.2 Acres

5.1.3 BREDI AGRICULTURAL ENTERPRISE, BREDI-DUAYAW NKWANTA



Manager: Kwesi Asare Agadzi
Contact Details: 0244751877
Number of Employees/Members: 14
Major Equipment Available: Graters [4], Double Screw Press [3], Single crew press [1], Hydraulic Press [2], Hammer Mill [1], Disc Attrition Mill [1], Chipper [1], Solar Dryer [1], Tractor [1].
Major Product: Gari
Current Production Scale: 268 olonka/wk
Water Source: Bore Hole (Community-owned)
Energy Source: Electricity/Diesel/Petrol **Land Size:** 1 Acre

5.1.4 ADWENPA CASSAVA FARMERS AND GARI PROCESSORS ASSOCIATION, APESIKA.



Manager: Mensah Abrampa
Contact Details: 0246289841/0208708021 (Douglas)
Number of Employees/Members: 20
Major Equipment Available: Grater [1], Double Screw Press [3], Roasting Stoves [6], Disc Attrition Mill.
Major Product: Gari
Current Production Scale: 250 olonka/wk.
Water Source: Bore Hole [but without a pump - manual withdrawal]
Energy Source: Diesel **Land Size:** 0.5

5.2 TECHIMAN DISTRICT CASSAVA PROCESSING SITES (SUMMARY OF FINDINGS)

5.2.1 AWOROWA COOPERATIVE CASSAVA PROCESSING AND MARKETING SOCIETY,



Manager: Hannah Duako
 Contact Details: NIL
 Number of Employees/Members: 40 [37F:3M]
 Major Equipment Available: Graters[2], Double Screw Press[2], Roasting Stoves with mild steel roasting pans[9], Disc Attrition Mill[1], Gari sifter[2].
 Major Product: Gar
 Current Production Scale: 3360 olonkas/wk
 Water Source: Bore Hole [community-owned], Hand-dug Well
 Energy Source: Diesel, Firewood. **Land Size:** 2 acres

5.2.2 CHRISTIAN MOTHERS ASSOCIATION GARI FACTORY. AKROFROM.



Manager: Christian Fabia (Auntie Ama)
 Contact Details: 0274075519 [Charles Oduro -Machine Operator]
 Number of Employees/Members: 92 [85F:7M]
 Major Equipment Available: Graters[2], Double Screw Press[10], Roasting Stoves with mild steel roasting pans[35-7 not in use],
 Major Product: Gari
 Current Production Scale: 6750 olonkas/wk
 Water Source: Bore Hole
 Energy Source: Electricity Diesel Firewood **Land Size:** 2 Acres

5.2.3 PAPASU ABA CASSAVA PROCESSORS GROUP, HANSUA, TECHIMAN



Manager: Constance Appiah
 Contact Details: 0246974118 [Abena Kyeremaa]
 Number of Employees/Members: 50 [47F:3M]
 Major Equipment Available: Grater[1-old and rusty], Double screw press[1], Single Screw press[1], Roasting stoves with mild steel roasting pans[8], Disc Attrition mill[1]. 8HP Diesel Engine
 Major Product: Gari
 Current Production Scale: 1200 olonkas/wk
 Water Source: Pipe-borne water[public-owned]

5.2.4 MANASE FOODS. IAMA TEMPONIM.



Manager: Emmanuel Twi-Yeboah/Charlotte Twi-Yeboah
 Contact Details: 0208121822
 Number of Employees/Members: 38
 Major Equipment Available: Grater[1], Double screw Press[1], Mild Steel roasting pans[8-3 not in use], Disc Attrition Mill [1-but not assembled],
 Major Product: Gari
 Current Production Scale: 3000 olonkas/wk
 Water Source: Rain Harvest
 Energy Source: Diesel, Firewood, **Land Size:** 1 acre

5.2.5 HANSUA WOMEN'S GARI SOCIETY, HANSUA, TECHIMAN.



Manager: Yahaya Mensah
 Contact Details: 0243589182
 Number of Employees/Members: 47 [37F:10M]
 Major Equipment Available: Graters[3-motor, diesel, petrol], Double Screw Press[3-one unserviceable], Mild steel roasting pans [22]
 Major Product: Gari
 Current Production Scale: 1000 olonkas/wk
 Water Source: None [Pipe borne from owners private house]
 Energy Source: Electricity, Diesel. **Land Size:** 1 acre

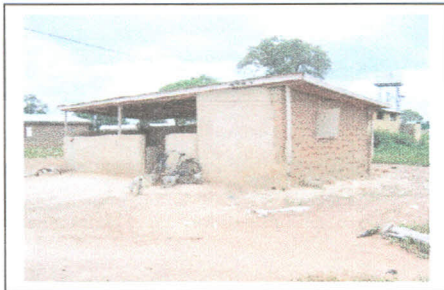
5.3 WEST GONJA DISTRICT CASSAVA PROCESSING SITES (SUMMARY OF FINDINGS)

5.3.1 KANYITIWALE I [OIC] PROCESSING FACTORY, DAMONGO.



Manager: Zuwera Abdulai
 Contact Details: NIL
 Number of Employees/Members: 23 [23F:0M]
 Major Equipment Available: Grater[1], Double Screw Press[1], Aluminium Roasting pans
 Major Product: Gari
 Current Production Scale: 1840 olonkas/wk
 Water Source: Bore Hole [about 300m from site]
 Energy Source: Petrol **Land Size: 0.1 acre**

5.3.2 KANYITIWALE II PROCESSING GROUP, DAMONGO.



Manager: Salamatu Braimah
 Contact Details: NIL
 Number of Employees/Members: 5 [4F:1M]
 Major Equipment Available: Grater[1], Double screw Press[2]
 Major Product: Gari
 Current Production Scale: 480 olonkas/wk.
 Water Source: Bore Hole [about 100m from site]
 Energy Source: Electricity, firewood. **Land Size: 0.2 acres**

5.3.3 SAMUKUSE GARI PROCESSING GROUP, DAMONGO CANTEEN.



Manager: Fuseini Akos
 Contact Details: NIL
 Number of Employees/Members: 41 [40F:1M]
 Major Equipment Available: Grater[1], Double Screw Press[1]
 Major Product: Gari
 Current Production Scale: 2460 olonkas/wk.
 Water Source: Dam and Bore Hole
 Energy Source: Electricity, petrol **Land Size: 0.2 acre**

5.3.4 ANWERINKANI PROCESSING GROUP, DAMONGO AGRIC. SETTLEMENT.



Manager: Hawa Ibrahim
 Contact Details: NIL
 Number of Employees/Members: 15 [15F:0M]
 Major Equipment Available: Grater[1], Double Screw Press[1]
 Major Product: Gari
 Current Production Scale: 720 olonkas/wk
 Water Source: Bore Hole [about 300m from site]
 Energy Source: Petrol **Land Size: 0.1 acre**

5.4 SEKYERE WEST DISTRICT CASSAVA PROCESSING SITES (SUMMARY OF FINDINGS)

5.4.1 YONSU CASSAVA PROCESSING FACTORY, YONSU.



Manager: Abraham Ocansey
 Contact Details: 0242208103
 Number of Employees/Members: 20
 Major Equipment Available: Graters[2], Double Screw Press[2], Single Screw press[1], Gas roasting stoves[10], firewood roasting stoves[10], hammer mill with cyclone[1], Dehusker/polisher[1], Crop Dryer[1], flour Sifter[1]
 Major Product: Gari
 Current Production Scale: 1200
 Water Source: Borehole [on-site]

5.4.2 DUKUKROM GARI PROCESSING ENTERPRISE, ADIDWAN.



Manager: Nana Ama Serwaa
 Contact Details: 0208225779/0208164367
 Number of Employees/Members: 15 [9F:6M]
 Major Equipment Available: Grater[2], Double Screw Press[1], Single Screw press[1], Gari Sifter[1], Aluminium Roasting pans[10]
 Major Product: Gari
 Current Production Scale: 600 olonkas/wk
 Water Source: None [Buys water]
 Energy Source: Petrol **Land Size: 2 acres**

5.4.3 JOSMA AGRO-INDUSTRIES, WORASO.



Manager: Kofi Frimpong
 Contact Details: 0208273455
 Number of Employees/Members: 20
 Major Equipment Available: Graters[3], Double Screw Press[1], Single Screw Press[2], aluminium roasting pans with chimney[16], Drying patio[1], Multicrop Sheller[1].
 Major Product: Gari
 Current Production Scale: 400 olonkas/wk
 Water Source: River water, and Rain harvest.
 Energy Source: Diesel and Firewood. **Land Size: 1.2 Acres**

5.4.4 RICKY OSEI, MAMPONG.



Manager: Richard Osei
 Contact Details: 0243327261
 Number of Employees/Members: No more in operation
 Major Equipment Available: No more in operation
 Major Product: N/A
 Current Production Scale: N/A
 Water Source: N/A
 Energy Source: N/A

6.0 ANALYSIS OF FINDINGS

6.1 Basic input costs and sales analysis of the processing centres by districts

Lack of adequate data due to no or improper record keeping by the Gari processing units makes it difficult to do a genuine profitability analysis. For instance the following records or information are not available at almost all the 17 processing units visited in the four districts:

- Cost of equipment and buildings/sheds, etc.
- Costs of the land – most of the entrepreneurs are even purging; even land sizes were not known.
- Daily or weekly cost of raw materials – particularly the cassava as they have no scales for weighing; water, firewood and others.
- Exact number of days in the week actual processing takes place, the number of permanent group members, casuals etc.

Nonetheless, the investigating team was able to extract sufficient information from the processors to enable reasonable extrapolation and estimation for certain vital figures. This was aimed at establishing bench marks or baseline data for future monitoring and evaluation purposes especially after RTIMP's intervention. As an example, the processors purchase their main input-fresh cassava by "KIA", "Boot" "condemned" or "rope" measurements, as they do not have appropriate scales to weigh them. Even the finished product: Gari, is sold by "olonka" or "mini" or "maxi" bag sizes – also due to lack of scales.

In order to do adequate cost/benefit analysis of the 4/5 processing centres visited per district, all the subjective measurement methods were converted into scientific scales by physical examination, actual measurement, averaging or extrapolation. The margin of error will be tolerable as this was applied to all the 17 processors. For instance, the team established that the following data given by the processors were equivalent to the scientific measurements attached correspondingly:

- | | | |
|---|---|------------------------|
| • Olonka | - | 2.2 kg |
| • KIA load | - | 5,400kg |
| • Condemned (Caravan car with sets removed) | - | 1,000kg |
| • Boot (i.e. car boot) load | - | 300kg |
| • Rope (cassava farm measured by rope and sold to the processors) | - | 500kg (9 ropes = 1 ac) |

- Pick-up - 2,700kg
- Bucket of water (purchased) - 20 litres
- Drum of water (purchased) - 210 litres

The processors also were definite on the varying yields of gari during the rainy/wet seasons (less gari) and the dry season (more gari), but these were compensated for by corresponding varying cost of the raw materials as they were more expensive to harvest during the dry seasons.

With the above conversions, the costs of inputs and sales were estimated for each processing unit, using figures provided by the group members. For the analysis, the following assumptions or omissions were made:

- 1) The cost of land and buildings were not available and hence not considered.
- 2) The cost of equipment was available only at two or three places and even not complete, and hence not considered.
- 3) Interest and loan repayments are not considered.
- 4) Only recurrent expenditure: cost of inputs and sales are considered.
- 5) Revenue from the sales of bi-products (peels, etc) is not considered as this is very negligible, and that all gari produced is sold.
- 6) Market women collect all gari produced in bulk, hence cost of packaging is not considered.
- 7) Data for processing one KIA load of raw cassava is used, as all groups had good memory of the cost, yield and processing times, and the results extrapolated to obtain annual production using their given frequencies of purchase of the raw materials.
- 8) The “KIA” load price is inclusive of the harvesting and transport of the cassava.

For easy reading and understanding, the profitability analysis is simplified in the tables that follow. Processing units within the same districts are compared as only one unit will be selected for the Good Practice Centre (GPC).

**6.1.1 PROFITABILITY (COST OF INPUTS AND SALES) ANALYSIS PER DISTRICT
DISTRICT: TANO NORTH DISTRICT, BAR**

No	Description	VISITED PROCESSING GROUPS IN THE DISTRICTS				Remarks
		Adwepa CF Proc. Asso. Apesika	Bredi Agric. Ent.	Brakoye CP Group Adrobaa	Nyame APC DN- Koforidua	
A.	COSTS					
	1. Fresh cassava purchased and processed per Wk. (€)	750,000	861,000	800,000	1,200,000	employs workers
	2. Labour - peeling per wk.	40,000	80,000	66,000	120,000	
	3. Labour - sieving/sifting and roasting/week (€)	50,000	80,000	84,000	168,000	
	4. Firewood/week (€)	137,000	140,000	130,000	260,000	
	5. Water per week (€)	-	5,000	2,000	28,000	
	6. Fuel, oil, repairs or electricity cost per week	74,000	74,000	150,000	148,000	
	7. Total Cost of Production	1,051,000	1,240,000	1,232,000	1,924,000	
B.	SALES					
	8. Quantity of Gari produced per week - olonka	250	268	227	400	part time. Also bought and retailed
	9. Average selling price per olonka (€)	7,000	7,500	7,500	7,000	
	10. Total Sales per week (€)	1,750,000	2,010,000	1,702,500	2,800,000	part time
C.	ANALYSIS					
	11. Net Profit (+)/Loss (-) (B - A) (€)	699,000	770,000	470,500	876,000	
	12. No. of weeks of Production	52	52	52	52	
	13. Amount of Profit/Loss/Annum €	36,348,000	40,040,000	24,466,000	45,552,000	
	14. No. in Group	20	14	10	50	
	15. Earning per Group member (€)	1,817,400	2,860,000	2,446,600	911,040	
	16. Ranking of Group highest earning = '1'	3	1	2	4	
	17. Remarks					

**6.1.2 PROFITABILITY (COST OF INPUTS AND SALES) ANALYSIS PER DISTRICT
DISTRICT: TECHIMAN , BAR**

No	Description	PROCESSING UNIT					Remarks
		Papa-So Aba Hansua I	Hansua Women Gari Society, Hansua II	Aworowa Coop. Cassava Proc. & Market. Soc.	Christian Mothers Assoc. Gari Factory	Manase Foods Ltd.	
A.	COSTS						
	1. Fresh cassava purchased per week (1 KIA - 900kg)	3,600,000	3,600,000	14,400,000	19,980,000	10,000,000	
	2. Labour - peeling	196,000	272,000	640,000	1,764,000	580,000	
	3. Labour - Roasting, sieving/sifting	160,000	255,000	952,000	3,500,000	720,000	
	4. Firewood/week (€)	500,000	550,000	2,400,000	3,050,000	2,000,000	
	5. Water per week (€)	-	4,000	14,000	30,000	20,000	
	6. Fuel, oil, repairs/ electricity cost per week	80,000	175,000	320,000	476,000	300,000	
	7. Total Cost of Production	4,536,000	4,856,000	18,726,000	28,800,000	13,620,000	
B.	SALES						
	8. Qty of Gari produced per week (No. of onlonka x 2.2kg or bags x 40 onlonka)	1200 onlonka (2640 kg)	1000 onlonka (2200 kg)	3360 onlonkas (7392 kg)	6750 onlonka (14850 kg)	3000 onlonka (6600 kg)	
	9. Sales per onlonka by proc. unit/average	6000/onlonka	5,500/onlonka	6000 (adj)	€6000 (adj)	5,000	price diff. may be due to quality diff.
	10. Total Sales per week (€)	7,200,000	€5,500,000	20,160,000	€40,500,000	15,000,000	
C.	ANALYSIS						
	11. Net Profit (+)/Loss (-) (sales - cost)	2,664,000	644,000	1,434,000	11,700,000	1,380,000	
	12. No of these/year as given by Group	52	52	52	52	44	claimed all year round
	13. Amt: Profit (+)/loss (-) per annum	138,528,000	33,488,000	74,568,000	608,400,000	60,720,000	
	14. No. in Group	50	47	40	92	38	
	15. Earning per member per annum	2,770,560	712,511	1,864,200	6,613,043	1,597,895	Though not all group members are active
	16. Ranking of Group highest earning = '1'	2	5	3	1	4	
	17. Remarks						

**6.1.3 PROFITABILITY (COST OF INPUTS AND SALES) ANALYSIS PER DISTRICT
DISTRICT: WEST GONJA, DAMANGO**

No	Description	PROCESSING UNIT				Remarks
		Anwerinkani P.G Agric Settlement	Kanayitiwale I OICI Proc. Group	Kanyitiwale II Proc. Group, Damango	Samakase Gari Proc. Group Canteen	
A.	<u>COSTS</u>					
	1. Fresh cassava purchased per week (1 KIA - 900kg)	2,700,000	8,670,000	2,200,000	12,300,000	
	2. Labour - peeling	150,000	600,000	110,000	616,000	
	3. Labour - Roasting, sieving/sifting	150,000	750,000	60,000	360,000	
	4. Firewood/week (€)	80,000	240,000	40,000	492,000	
	5. Water per week (€)	4,000	70,000	21,000	64,000	
	6. Fuel, oil, repairs/ electricity cost per week	720,000	1,100,000	9,000	2,300,000	
	7. Total Cost of Production	3,804,000	11,430,000	2,440,000	16,132,000	
B.	<u>SALES</u>					
	8. Qty of Gari produced per week (No. of olonka x 2.2kg or bags x 40 olonka)	720	1,840	480	2,460	
	9. price per olonka by proc. unit/average	7,000	7,000	8,000	7,000	
	10. Total Sales per week (€)	5,040,000	12,880,000	3,840,000	17,220,000	
C.	<u>ANALYSIS</u>					
	11. Net Profit (+)/Loss (-)(sales - cost)	1,236,000	1,450,000	1,400,000	1,088,000	
	12. No of these/year as given by Group	26	26	26	26	
	13. Total profit/annum	32,136,000	37,700,000	36,400,000	28,288,000	
	14. No. in Group	15	23	5	41	
	15. Earning per member per annum	2,142,400	1,639,130	7,280,000	689,951	
	16. Ranking of Group highest earning = '1'	2		1	4	
	17. Remarks					

**6.1.4 PROFITABILITY (COST OF INPUTS AND SALES) ANALYSIS PER DISTRICT
DISTRICT: SEKYERE WEST, ASR**

No	Description	VISITED PROCESSING GROUPS IN THE DISTRICTS				Remarks
		Yonso Cassava Proc. Factory	Josma Agric Industry Ltd.	Dukukrom Cassava Proc. Ent.	Ricky Osei	
A.	<u>COSTS</u>				Closed down	
	1. Fresh cassava purchased and processed per Wk. (¢)	6,600,000	1,925,000	3,000,000		employs workers
	2. Labour - peeling per wk.	1,900,000	589,000	450,000		
	3. Labour - sieving/sifting and roasting/week (¢)	1,500,000	970,000	350,000		
	4. Firewood/week (¢)	825,000	31,250	360,000		
	5. Water per week (¢)	60,000	nil	210,000		
	6. Fuel, oil, repairs or electricity cost per week	141,000	45,000	111,000		
	7. Total Cost of Production	10,626,000	3,560,250	4,481,000		
B.	<u>SALES</u>				Closed down	
	8. Quantity of Gari produced per week - olonka	1,200	400	600		part time. Also bought and retailed
	9. Average selling price per olonka (¢)	10,000	10,000	8,000		
	10. Total Sales per week (¢)	12,000,000	4,000,000	4,800,000		part time
C.	<u>ANALYSIS</u>				Closed down	
	11. Net Profit (+)/Loss (-) (B - A) (¢)	1,374,000	439,750	319,000		
	12. No. of weeks of Production	40	52	52		
	13. Amount of Profit/Loss/Annum (¢)	54,960,000	22,867,000	16,588,000		
	14. No. in Group	20	20	15		
	15. Earning per Group member (¢)	2,748,000	1,143,350	1,105,867		
	16. Ranking of Group highest earning = '1'	1	2	3	N/A	
	17. Remarks					

6.2 Ratings for the Various Processing Centers Surveyed.

Summarised below are the ratings of the various processing centres based on the application of the point scoring system to the survey data.

TANO NORTH DISTRICT PROCESSING COMPANIES & ENTERPRISES

No	Criteria	Weight Average	Adwepa CF Proc. Asso. Apesika		Bredi Agric Ent.		Brakoye CP Group Adrobaa		Nyame Apc DN Koforidua		Remarks
			Score	Points	Score	Points	Score	Points	Score	Points	
1	Evidence of availability of regular supply of raw materials and other inputs.	9	4	36	5	45	3	27	2	18	
2	Evidence of profitability and viability	6	3	18	5	30	4	24	2	12	
3	Adequate space for structural expansion	10	4	40	5	50	3	30	3	30	
4	Amenable to training personnel and staff capable to train others	17	4	68	3	51	1	17	1	17	
5	Accessible, good road, short distance from district capital, or accommodation.	12	1	12	3	36	4	48	5	60	
6	Demonstrated evidence of ownership of land, property acquired.	13	4	52	4	52	2	26	2	26	
7	Well structured management, record keeping system or possible to institute.	14	3	42	3	42	2	28	2	28	
8	Adaptability for GPC and willingness of proprietor	3	3	9	4	12	2	6	2	6	
9	Initial Basic equipment present, & potential to be upgrade to GPC standard	11	4	44	5	55	3	33	3	33	
10	Good Hygienic practices, available Water, Toilets& Electricity	5	3	15	4	20	2	10	1	5	
11	Total points/processing group	100		336		393		249		235	
12	Ranking & selected enterprise			2		1		3		4	

WEST GONJA DISTRICT PROCESSING COMPANIES & ENTERPRISES

No.	Criteria	Weight Average	Anwerinkani P. G. Agric Settlement		Kanayitiwale I OICI Proc. Group		Kanyitiwale II Proc. Group, Damango		Samakase Gari Proc. Group Canteen		Remarks
			Score	Points	Score	Points	Score	Points	Score	Points	
1	Evidence of availability of regular supply of raw materials and other inputs.	9	3	27	3	27	3	27	3	27	
2	Evidence of profitability and viability	6	4	24	3	18	5	30	2	12	
3	Adequate space for structural expansion.	10	1	10	1	10	2	20	1	10	
4	Amenable to training personnel and staff capable to train others.	17	2	34	2	34	2	34	2	34	
5	Accessible, good road, short distance from district capital, or accommodation.	12	4	48	3	36	4	48	4	48	
6	Demonstrated evidence of ownership of land, properly acquired.	13	1	13	1	13	4	52	1	13	
7	Well structured management, record keeping system or possible to institute.	14	1	14	2	28	1	14	1	14	
8	Adaptability for GPC and willingness of proprietor.	3	1	3	1	3	2	6	1	3	
9	Initial Basic equipment present, & potential to be upgraded to GPC standard.	11	2	22	2	22	3	33	2	22	
10	Good Hygienic practices, available Water, Toilets& Electricity.	5	1	5	1	5	1	5	1	5	
11	Total points/processing group.	100		200		196		269		188	
12	Ranking & selected enterprise			2		3		1		4	

TECHIMAN DISTRICT PROCESSING COMPANIES & ENTERPRISES

No.	Criteria	Weight Average	Papa-So Aba Hansua I		Hansua Women Gari Society, Hansua II		Aworowa Coop. Cassava Proc. & Market. Soc.		Christian Mothers Associ. Gari Factory		Manase Foods Ltd.		Remarks
			Score	Points	Score	Points	Score	Points	Score	Points	Score	Points	
1	Evidence of availability of regular supply of raw materials and other inputs.	9	5	45	3	27	5	45	5	45	3	27	
2	Evidence of profitability and viability.	6	4	24	1	6	3	18	5	30	2	12	
3	Adequate space for structural expansion.	10	4	40	4	40	4	40	4	40	4	40	
4	Amenable to training personnel and staff capable to train others.	17	2	34	4	68	5	85	3	51	3	51	
5	Accessible, good road, short distance from district capital, or accommodation.	12	4	48	4	48	4	48	4	48	4	48	
6	Demonstrated evidence of ownership of land, properly acquired.	13	3	39	3	39	3	39	3	39	3	39	
7	Well structured management, record keeping system or possible to institute.	14	1	14	5	70	4	56	3	42	4	56	
8	Adaptability for GPC and willingness of proprietor.	3	1	3	4	12	4	12	2	6	3	9	
9	Initial Basic equipment present, & potential to be upgraded to GPC standard.	11	2	22	5	55	5	55	3	33	3	33	
10	Good Hygienic practices, available Water, Toilets& Electricity.	5	2	10	3	15	2	10	2	10	2	10	
11	Total points/processing group.	100		279		380		408		344		325	
12	Ranking & selected enterprise			5		2		1		3		4	

SEKYERE WEST, MANPONG DISTRICT PROCESSING COMPANIES & ENT.

No.	Criteria	Wted Ave.	Yonsu Gari Proc. Factory, Yonsu		Josma Agro Ind. Ltd., Woraso		Dukukrom Gari Proc. Ent. Adinwa		Ricky Osei	Remarks
			Score	Points	Score	Points	Score	Points	Abandoned	
1	Evidence of availability of regular supply of raw materials and other inputs.	9	3	27	5	45	3	27		
2	Evidence of profitability and viability	6	5	30	4	24	3	18		
3	Adequate space for structural expansion.	10	4	40	4	40	4	40		
4	Amenable to training personnel and staff capable to train others.	17	5	85	4	68	2	34		
5	Accessible, good road, short distance from district capital, or accommodation.	12	3	36	5	60	4	48		
6	Demonstrated evidence of ownership of land, properly acquired.	13	4	52	4	52	4	52		
7	Well structured management, record keeping system or possible to institute.	14	4	56	4	56	3	42		
8	Adaptability for GPC and willingness of proprietor.	3	5	15	4	12	3	9		
9	Initial Basic equipment present, & potential to be upgrade to GPC standard.	11	5	55	4	44	3	33		
10	Good Hygienic practices, available Water, Toilets& Electricity.	5	4	20	4	20	4	20		
11	Total points/processing group.	100		416		421		323		
12	Ranking & selected enterprise			2		1		3		4

7.0 CONCLUSION AND RECOMMENDATION

From the preceding, four (4) centres have been identified and are being recommended for upgrading to GPCs. They are Bredi Agricultural Enterprise in the Tano North District, Aworowa Cooperative Cassava Processing and Marketing Society in the Techiman Municipality, Kanyitiwale II Processing Group in the West Gonja District and Josma Agricultural Industry Ltd in the Sekyere West District.

The investigation team further recommend that the under listed interventions be considered, amongst others, in the upgrading of the respective centres.

NO	DISTRICT	CENTRE	EQUIPMENT	CIVIL WORKS	WATER	OTHERS
1	Tano North	Bredi Agric Enterprise	Mechanical dryer, Weighing scale, Sealing machine, Bag sewing machine, Stainless steel cassava graters,	Office, Changing room, Warehouse, Peeling Shed	Borehole, or Poly Tank fitted with filters.	mill
2	Techiman	Aworowa Coop Cassava Processing and Marketing Society	Stainless steel cassava grater with electric motor, Bag sewing machine, Sealing machine, Mechanical dryer, Weighing scale,	Soak-away, Tiled fermentation basin, Tiled washing basin, Fence wall	Borehole, Poly Tank fitted with filters and Tap	Compound levelling
3	West Gonja	Kanyitiwale II Processing Gp	Solar dryer, Weighing scale, Sealing machine, Bag sewing machine, Stainless steel cassava graters,	Soak-away, Tiled fermentation basin, Tiled washing basin, Office, Processing hall, Warehouse, washing room, Fence wall, peeling and roasting sheds	Borehole, Poly Tank fitted with filters and Tap	Compound levelling
4	Sekyere West	Josma Agricultural Industry	Mechanical dryer, Weighing scale, Sealing machine, Bag sewing machine, Stainless steel cassava graters,	Soak-away, Fence wall, processing room.	Borehole, Poly Tank fitted with filters and Tap	Compound levelling/ screeding

Furthermore, the selected implementer of the upgrading process should be additionally tasked to provide detailed structural lay-out and equipment assessment and costing for each processing centre.

7.1 Recommended Standard Equipment and facilities for a Cassava Processing GPC

7.1.1 Equipment

- Stainless Steel Cassava Grater, preferably electric motor driven
- Screw Press
- Stainless steel Hammer mill with sifter
- Mechanical dryer where cassava flour is produced
- Burnt brick oven and cast roasting pans

7.1.2 Facilities

- Tiled fermentation trough
- Tiled dehydration pit with soak-away
- Tiled washing trough
- Hand gloves, nose masks/head covers

7.1.3 Packaging

- Weighing scales for raw cassava (150 – 200kg) and for finished products (1 – 20kg)
- Bag sewing machine
- Heat sealing machine
- Packaging table with top being stainless steel or aluminium-plated.

7.1.4 Building

- Office
- Processing hall/shed (for peeling, grating, roasting and packaging)
- Warehouse for finished products
- Wash rooms

7.2 WORK PLAN FOR SETTING UP OF FOUR GPCs

The following work plan is proposed to guide the PCO and the implementer for the rest of the exercise.

	Start	Finish	Responsible agent
Selection of GPCs			
Inputs for report writing		6th July 2007	Investigating team
Report writing meeting	6th July	9th July	Investigating team
Submission of Draft Final Report		13th July	Investigating team
Submission of Final report		20 th July	Investigating team
Approval of Proposed GPCs		31st July	PCO
Preparatory works for establishment			
Detailed Structural Equipment Assessment	6th August	11th August	IP (Implementer)
Preparation of Structural Drawings	13th August	18th August	IP (Implementer)
Submission of Drawings and costs		21st August	IP (Implementer)
Approval of drawings and costing		8th Sept	PCO
Implementation			
Release of funds		22nd Oct	PCO
Equipment manufacture and testing	24th Sept	23rd Nov	IP (Implementer)
Installations	29th Oct	30th Nov	IP (Implementer)
Civil works	24th Sept	23rd Nov	IP (Implementer)
Test Running	7th Nov	15th Dec	IP (Implementer)
Handing over		21st Dec	IP (Implementer)

8.0 APPENDIX

SUMMARY OF RAW FIELD DATA

BASIC MANAGEMENT INFORMATION

Basic Information						Top Management								
District	Company Name	Location	Date Started	Ownership Type	Land ownership	Name of Manager	Sex	Age	Educational Level	Telephone Contact	Name of Owner	Sex	Age	Educational Level
Tano North	Biakoye cassava Processing Group	Adrobaa	2003	Group Ownership	Community Owned	NANA ADWOA BADU	F	60 YRS	illiterate		Group			
	Nyame Akwan Processing Center	Duayaw Nkwanta-Koforidua	2003	Group Ownership-Service Facility	Community Owned	ROSE BOAHEMAA	F	40 YRS	form four (middle school)	249854043	Group			
	Bredi Agricultural Enterprise	Duayaw Nkwanta-Bredi	2004	Sole Ownership	Individual:Nana Kwadwo Senti	KWASI ASARE AGADZI	M	55 YRS	Bsc & MBA	244751877	Nana Kwadwo Senti	m	65 YRS	Bsc Admin
	Adwenpa Cassava Farmers and Gari Processors Association	Apesika	6/24/1905	Cooperative	Individual-But gift to Association: Mr Manu Boateng Gift to Assoc	MR. MENSAH ABRAMPA	M	65 YRS	Agric College: Bonso 3: Diploma in Agric	0246289841/ 0208708021(Douglas)	ACF & GPA			
Techiman	Aworowa Cooperative Cassava Processing and Marketing Society	Aworowa - Techiman	1994	Cooperative	Nana Odei Ababio (Chief)-Donated to Association	HANNAH DUAKO	F	64 YRS	illiterate		Community			
	Christian Mothers Association Gari Factory	Akrofrom-Techiman	1996	Catholic Church	Catholic Church	CHRISTIANA FABIA (AUNTIE AMA)	F	45-50YRS	Partially Literate		Christian Mothers Association			
	Papasu Aba	Hansua - Techiman	2003	Private Individual	Private Individual	CONSTANCE APPIAH	F	50 YRS	Middle Form Four		Braimah Adjei / Abena Kyeremaa	m	73 YRS	Literate
	Manase Foods	Jama Temponim	2004	Sole Ownership- But run by cooperative	Sole Ownership	EMML TWI-YEBOAH/ CHARLOTTE TWI-YEBOAH (Land Economy)	M/F	56/22 YRS	Bsc. Education	208121822	Emml Twi-Yeboah	m	56 YRS	Bsc Education
	Hansua Women's Gari society	Hansua	Jun-05	Sole Ownership	Sole Ownership	YAHAYA MENSAH	M	49 YRS	Middle Form Four	243589182	Nana Aparenten Fosu Gyeabour II	m	54-55 YRS	Graduate (Masters)

West Gonja	Kanyitiwale I [OIC] Processing Factory	Damongo	2004	Group Ownership	Private Ownership-Sulemana Pisigu	ZUWERA ABDULAI	M	35 YRS	illiterate		Group			
	Kanyitiwale II Processing Group	Damongo	2006	Group Ownership	Group Ownership	SALAMATU BRAIMAH	F	35 YRS	illiterate		Group			
	Samukuse Gari processing Group	Damongo Canteen	2002	Group Ownership	Private Ownership	FUSEINI AKOS	F	35 YRS	Middle Form Four		Group			
	Anwerinkani Processing Group	Damongo Agric Settelement	2002	Group Ownership	Private Ownership-Dawuni Yidane	HAWA IBRAHIM	F	60+ YRS	illiterate					
Sekyere West	Yonsu Cassava Processing Factory	Yonsu	Jun-05	Sole Ownership	Private	MR ABRAHAM OCANSEY	M	45-47 YRS	Secondary		Nana Asare Yeboah Kordleh	m	65+ YRS	Graduate (Lawyer)
	Dukukrom Gari Processing Enterprise	Adidwan	2005	Sole Ownership - Cooperative	Husband's Land	NANA AMA SERWAA	F	68 YRS	illiterate	0208225779/ 0208164367				
	Josma Agro-Industries	Woraso	2003/2004 (operation)	Limited Liability Compnay	Company Ownership	KOFI FRIMPONG	M	45 YRS	GCE 'O' Level	208273455	Company Ownership (Gyimah Kesse Family)			
	Ricky osei	Mampong												

FACILITIES AND UTILITIES

Basic Information		Facilities					Utilities	
District	Company Name	Total land Area	Land Area Occupied	Type of Structure	Type of Access Road	Proximity to Accommodation	Water Source	Energy Types
Tano North	Biakoye cassava Processing Group	0.2 acre	4m × 7m	Wooden Structure	Feeder Road	8.8 Km	Bore Hole	Petrol Engine
	Nyame Akwan Processing Center	0.2 acre	7m × 8m	Wooden Structure	Main Trunk Road (Kumasi-Sunyani)	4Km	Bore Hole (Public)	Petrol, Electricity
	Bredi Agricultural Enterprise	1acre	0.7 acre	Shed	Feeder Road-Motorable	2.6 Km - 3Km	Community Bore Hole (100m from Processing site)	Electricity (milling), Diesel (grating), Solar (Drying), Firewood (Roasting), Petrol (Chippen)
	Adwenpa Cassava Farmers and Gari Processors Association	0.5 acre		Wooden Structure(Processing hall), Block Roasting and Stove	Tarred, Rough		Bore hole but without pump: Manual withdrawal	Diesel Engine
Techiman	Aworowa Cooperative Cassava Processing and Marketing Society	2 acres	15 × 12m- Building 30 × 8m-Shed	Shed (Iron shed roofed), Building (half wall,expanded) Iron shed roofed	Main Trunk Road		Bore hole (community owned) broken down, well (cooperative owned)	Diesel Engine Fire wood
	Christian Mothers Association Gari Factory	2 acres		Block Building; sheds	Main Trunk Road-Techiman-Wenchi		Bore Hole	Electricity, Diesel, Fire wood
	Papasu Aba		0.7 acre	Wooden Structure & Shed (thatch)	Main Trunk Road-Small feeder		Pipe but not available on site	Diesel engine, firewood
	Manase Foods	1 acre	30 × 12m / Shed 11 × 8m	Building (Roofed but not concreted)/ Shed is roofed	Main Trunk Road: Techiman-Wenchi, small stretch of rough road		Rain	Diesel, Firewood, Electricity close but not connected
	Hansua Women's Gari society	1 acre	2 sheds: 15 × 6m, Building: 24 × 16m (Warehouse & Processing Hall)	Block Building (Processing & Offices) + Shed (from roofing)	Main Road		None- From owners personal house	Electricity, Diesel
West Gonja	Kanyitiwale I [OIC] Cassava Processing Factory			Wooden-roofed & well kept			Bore hole: 300m away	
	Kanyitiwale II Cassava Processing Group	0.2 acre	12 × 5m	Shed block- one room (Grater), well roofed			Bore hole: 100m from side	Electricity, firewood

	Samukuse Gari processing Group	Portion of building plot	10 × 5m	Wooden structure, one room, well roofed			dam & Bore hole	Electricity, petrol
	Anwerinkani Processing Group						Bore Hole: 300m away: water all year round	Petrol
Sekyere West	Yonsu Cassava Processing Factory		0.8 acre	Complete Buikding- all facilities: shed for peeling & firewood	feeder road	19 Km (Mampong, 6.3 Km (Jamasi)	Bore Hole with pump to averhead tank	Electricity, Gas, Firwood
	Dukukrom Gari Processing Enterprise			Shed;ow wall expanded metal	Main trunk road (1 Km off main road form road)	25Km	None but purchase (water big problem)	petrol
	Josma Agro-Industries	1acre + (1 to acres)				20 Km (Mampong)	River (100 tp 200m Away) all year round, harvested rain water	Diesel, firewood
	Ricky osei							

PRODUCT OUTPUTS AND LEVEL OF WORK INTENSITY

Basic Information		Product Output		Level of Work Intensity					By/Waste Products Utilisation	
District	Company Name	Major Products	Output (olonka/wk)	Full/Part Time	Hours/day	Days/wk	Seasonal/Year Round	Reason for Seasonality	By-Products	Utilisation
Tano North	Blakoye cassava Processing Group	Gari	20 × 25Kg/week	Part time	9	5	Seasonal	Raw material constraint & marketing constraints (school's vacation)	Starch, Peels, Fibres	Free for pigs & cattle owners-peels, Kokonte (for sale & consumption) - Fibres
	Nyame Akwan Processing Center	Gari	10 bags @ 40 olonkas/bag	Part time (Individuals Processing)		7	All year		Starch, Peels, Fibres	
	Bredi Agricultural Enterprise	Gari, Kokonte, Starch	5.5 × 80 Kg/wk-Gari 1.5 × 100Kg/wk-Kokonte	Full Time	9	6	All year		Starch, Peels, Sifted Fibres	For Tapioca - Starch, Left In Farm (Mushroom)- Peels Not sifted-Fibre
	Adwenpa Cassava Farmers and Gari Processors Association	Gari	5bags/wk for 3 working days	Part time		5	All year		peels + mixed with palm waste, Starch liquor, Fibre	Mushroom production-peels, Land fill - starch liquor, Kokonte - Fibre
Techiman	Aworowa Cooperative Cassava Processing and Marketing Society	Gari, Kokonte	56 bags @ 60 olonka/bag	Full Time	16	7	April-July	Raw material availability and harvesting problems	peels, sifted waste, Starch	Thrown away (cattle feed)-peels, Kokonte 9sifted waste, waste - starch
	Christian Mothers Association Gari Factory	Gari	100bags: 65-70 olonka/bag	Full Time	16.5	6	All year		Sifted waste, peels, Starch	Kokonte- sifted waste
	Papasu Aba	Gari	20bags @ 60 olonka/bag	Full Time (pay day for farm workers)	17	7	All year		Sifted waste, peels, Starch	Kokonte- sifted waste, Waste-starch, thrown away or free for pigs-peels
	Manase Foods	Gari	50bags (60 olonka/bag)- 20 owned by farmers, 30 owned by assoc.	Full Time (Shift system)	10.1	6	All year		Sifted waste, peels, Starch	Kokonte- sifted waste, Dumped or given to cattle Owners)

	Hansua Women's Gari society	Gari	20 bags @ 50 onlonka/bag	Full Time	11.5	7	All year		Sifted waste, peels	Kokonte - sifted waste, given out-peels
West Gonja	Kanyitiwale I [OIC] Processing Factory	Gari	2bags/person/week= 46bags	Part time	11	3 to 4	All year		Starch, peels	Waste - starch, thrown away-peels
	Kanyitiwale II Processing Group	Gari	2 to 3 bag/person/wk= 12 bags @ 40 onlonka/bag	Part time	7 or 9	4	Seasonal	Financial constriants	Starch, peels, Sifted Chaff	Tapioca-starch, pigs feeding-peels, Sold to sellers
	Samukuse Gari processing Group	Gari	1.5 bags/person/wk=6.5 bags	Part time		7	9 months	Shea nut work & farm work	peels	sold when no foliage @ €2000/basin
	Anwerinkani Processing Group	Gari	1 to 1.5 bags/person/wk	Part time	7 to 8	3	All year but 6 mnths effective)		peels	waste
Sekyere West	Yonsu Cassava Processing Factory	Gari,Starch, Cassava Flour,Yoghurt	30bags @ 40 onlonka per bag	Full time	9 or 10	6	All year		Starch (collected),Sifted fibre	Sale to clothe producers-starch,Kokonte-sifted fibre
	Dukukrom Gari Processing Enterprise	Gari	14 to 16bags @40 bags	Full time	10 to 11	7 days if cassava is available	Seasonal	Marketing constriants	Sifted Chaff, Small tubers,starch,peels	kokonte - sifted chaff/small tubers, waste-starch, dried & sold to cattle rearers @ € 40,000/bag
	Josma Agro-Industries	Gari, Flour	8 to 12 bags @40 onlonka/bag	Full time	7.5,8,8,9.5	6	all year		peels,sifted chaff, starch	for animal feed-peel,for kokonte-sifted chaff,
	Ricky osei									

EQUIPMENT AND OTHER FACILITIES

Basic Information		Type of Equipment					Other Facilities		Equipment Required
District	Company Name	Graters	Presses	Roasters	Mills	Sifters	Fermentation Rack/Troughs	Washing Troughs	Name & Number
Tano North	Biakoye cassava Processing Group	IITA Design Grater	Locally made Double Screw Press-broken down	Roasting Pans		Gari Sifter	Fermentation Rack		1) Extra Presses, 2) Robust Grater, 3) Vehicle (Tractor)
	Nyame Akwan Processing Center	IITA Design Grater (Gratis)-petrol engine	Double Screw Press			Gari Sifter	fermentation Rack		1) Electric Motor 2) Blgger Grater
	Bredi Agricultural Enterprise	Gratis Cassava Graters (4)-one was uninstalled	GRATIS Double Screw Press (3) Single Screw Press (1) Hydraulic Press (1) but uninstalled		FOREIGN Hammer Mill (1) Corn Mill (1)		Chipper (1) but uninstalled Tractor Solar Dryer		1) Motoring Equipment 2) Mechanical Dryer 3)Cast Aluminium Roaster 4) Repair of one Diesel & reinstallation of engine
	Adwenpa Cassava Farmers and Gari Processors Association	GRATIS grater (1)	Double Screw Press (3)	Roasting pans (6)	Corn Mill				1) Tractor for transportation of raw materials
Techiman	Aworowa Cooperative Cassava Processing and Marketing Society	Conv. Graters (2)	Double screw press(2) but one sent for repairs	Mild steel roasting pans (9)	Corn Mill(1)	Gari Sifter (2)	Fermentation Rack(1)		1) Additional grater 2) Replacement of Diesel Engine 3)Presees (5)
	Christian Mothers Association Gari Factory	Graters (2) but one is broken down IITA designed grater but not in use	Double Screw Press (10) but two spoilt	Mild steel Roasting pans (35) but seven not in use			Hand dug well with pump but not working		1) Extra Graters (2) 2) Extra presses (4)
	Papasu Aba	Grater (old & rusty)	Double screw Press (1) Single screw Press (1)	Mild Steel Roasting Pans (8)	Corn Mill		8HP Diesel Engine (Oil leaking)		1) Presses (5) 2) Grater
	Manase Foods	Grater	Double Screw Press (1)	Mild Steel Roasting pans (8)- 3 not in use	Corn Mill (unassembled)		8HP Diesel Engine		1) Sealing Machine 2) Corn Mill 3) New Grater (older too laborous to

									operate 4)Roasting pans(10) 5) Presses (2) 6)
	Hansua Women's Gari society	Vertical Grater with 15HP Electric Motor, Vertical Grater with 8HP Diesel Engine, IITA Grater with 4HP Petrol Engine (Unserviceable)	Double Screw Press (3) but 1 unserviceable	Mild Steel Roasting Pans (22) with 2 Roasting sheds			Fermentation Rack		1) Hammer Mill 2) Sealing Machine 3) Bag sewing Machine 4) Presses (2)
West Gonja	Kanyitlwale I [OIC] Processing Factory								
	Kanyitlwale II Processing Group	Grater	Double Screw Press				Electric Motor:11Kw × 76 =Hp		1) Sealing Machine 2)Bag sewing machine 3)Donkey cart 4)Fencing of the area
	Samukuse Gari processing Group								
	Anwerlnkani Processing Group								Corn mill
Sekyere West	Yonsu Cassava Processing Factory	Grater IITA Design [2],	Double Screw Press [2], Single Screw Press[1]	Gas roasting stoves[10], Firewood roasting stoves[10]	Hammer Mill with cyclone,	Flour Sifter	Fermentation Racks[2], Fermentation Troughs[1], Dehusker /Polisher, Diesel crop Dryer.	Washing trough	Hand sewing machine
	Dukukrom Gari Processing Enterprise	Graters IITA Design[1], Conventional grater[2]	Single Screw press[2], Double screw press[1],	Alluminum roasting pans with chimneys[16]	Hammer mill.		Tiled fermentation trough, Tiled washing basin, Drying patio, multicrop sheller		1) Hammer mill 2) tractor 3)Heat sealing machine 4)Bag sealing Machine
	Josma Agro- Industries								1)Stirrer Roaster 2)Cassava harvester 3)Gari Grader
	Ricky osei								

SANITATION AND RECORD KEEPING

Basic Information		Sanitation and Hygiene						Record Keeping		
District	Company Name	Equipment	Processing Area	Ext. Environment	Hand Washing Facility	Toilet Facility	Protective Clothing	Production Records	Financial Records	Sales Records
Tano North	Blakoye cassava Processing Group	After every operation	After every operation (not properly done)		None	Public: 100m away	None	Yes (N/A)	Yes (N/A)	yes (N/A)
	Nyame Akwan Processing Center	After every operation	After every operation	Before start of every operation	None	Public: 500m away	None	2003 Records only (service Charges)	2003 Records only (service Charges)	2003 Records only (service Charges)
	Bredi Agricultural Enterprise	After every operation	After every Operation	Every two weeks	None	Public	None	Yes	Cash Book- But Irregular	Cash Book- But Irregular
	Adwenpa Cassava Farmers and Gari Processors Association	After every operation	After every operation	as & when required	None	Pit	None	Quality Gari/ Visitors' book		Sales records
Techiman	Aworowa Cooperative Cassava Processing and Marketing Society	After every operation	Sweeping	Once a while (weeding)	once a while	Bush/ Public	None	Grating & press, milling -qty & charge	Grating & press, milling -qty & charge	
	Christian Mothers Association Gari Factory	After every operation	Sweeping after operation, scrubbing every three weeks	sweeping daily, weekly general cleaning on Friday, weeding on contract	None	School Toilet	None	Grating Records & charges		
	Papasu Aba	Brushing Daily	Sweeping Daily, no washing	Daily	None (Individual)	Public Toilet	None	Nil	Nil	Nil
	Manase Foods	After every operation	Sweeping	Weeding	With Soap	Pit	None	Production Records-okay	Expenditure Records-poor	Sales Records

	Hansua Women's Gari society	After every operation	Every Day	Daily	none	Yes	None	Production records,Visitors book,attendance book,minutes book	Cash Book	
West Gonja	Kanyitiwale I [OIC] Processing Factory								Cash Book(expenditure) & Income	
	Kanyitiwale II Processing Group					Public toilet				
	Samukuse Gari processing Group									
	Anwerinkani Processing Group				none					
Sekyere West	Yonsu Cassava Processing Factory					Toilet		production records/attendance/visitors book	cash book	
	Dukukrom Gari Processing Enterprise	After every operation	After every operation	as it is possible	yes	yet to be constructed, use public toilet		Production records	expenditure	sales
	Josma Agro-Industries	Day after every operation	After every operation		Yes/ocassionally	KVIP	Hand gloves & head covers	Production data/maintanance/supplies	monthly financial records	
	Ricky osei									

HUMAN RESOURCES AND WILLINGNESS TO BECOME A GPC

Basic Information		Human Resources		Willingness to Become a GPC		
District	Company Name	Total Staff	Categories of Staff	Becoming a GPC	Readiness to be trained	Assistant Availability whilst on course
Tano North	Blakoye cassava Processing Group	10	1) Machine Operator 2) Supervisor 3)Sales Person 4)Factory Hands (10)	Yes	Yes	Yes
	Nyame Akwan Processing Center	50	Retail Supervisor	Yes	Yes	Yes - Sister Felicia
	Bredi Agricultural Enterprise	14	1) Plant Supervisor (1) 2) Machine Operator (1) 3)Factory Hands (3) 4) Casuals (9)- harvesting and haulage	Yes	Yes	Yes
	Adwenpa Cassava Farmers and Gari Processors Association	20	Maintanace Technician	Yes	Yes	Yes
Techiman	Aworowa Cooperative Cassava Processing and Marketing Society	40	Operator	Yes	Yes	Yes
	Christian Mothers Association Gari Factory	92	Operator	Yes	Yes	Yes
	Papasu Aba	50	Service Mill	Yes	Yes	Yes
	Manase Foods	38	1) Sales-Akos 2) Production-Amalla 3) Operatlon-Kwabena 4) Manager	Yes	Yes	Yes
	Hansua Women's Gari society	47	Operators	Yes	Yes	Yes
West Gonja	Kanyitiwale I [OIC] Processing Factory	23				
	Kanyitiwale II Processing Group	5		Yes	Yes	Yes
	Samukuse Gari processing Group	41	Executives	Yes	Yes	Yes
	Anwerinkani Processing Group	15		Yes	Yes	Yes
Sekyere West	Yonsu Cassava Processing Factory	20	1) Roasting (20) 2)Peeling (30) 3)Machine operators,loading & equipment (12)	Yes	Yes	Yes

	Dukukrom Gari Processing Enterprise	15	1)manager 2)Secretary 3) Treasurer 4)Machine operator (3) 5)peelers-casuals (13 to 14) 6)Roasters-casuals (12)	Yes	Yes	Yes
	Josma Agro-Industries	20	1)Executive director 2) Plant manager 3)Machine operators (2) 4) Accounts officer 5) Roasters/peelers (16)	Yes	Yes	Yes
	Ricky osei					