

IMPACT STUDY

OF THE MULTIFUNCTIONAL PLATFORM ON THE LIVING CONDITIONS OF WOMEN ⁽¹⁾

MALI, June 2001.

FOREWORD

Awa Diallo, President of the women's association of the village of Watenebouyou (the Sikasso Advisory and Support Unit) said of the multifunctional platform :

« It is the daughter in law who doesn't speak... »

By these words one should understand that this refers to a woman who is not reluctant to do her tasks, who works day and night willingly and without a whimper.

This sentence alone sums up all the issues addressed by the platform concept.

The extra work of rural women in the household is time consuming especially with the archaic techniques and means at their disposal: pestles, mortars, millstones, the traditional way of drawing water.

With the women of Watenebouyou we were able to evaluate the length of time spent in performing domestic chores throughout a woman's life: between 30 and 35 years.

In fact, domestic work begins at the age of 8 for the girls and continues when they become household women.



If a first child is a boy then they stand a good chance of having a daughter in law at home who will take over the domestic tasks there by giving them the privileged status of mother-in-law; as a result they will be able to enjoy a well deserved retirement after 30 years of domestic services.

Hence, we should not be surprised by the attitude of women and even sometimes by their reluctance toward girl schooling as by their tacit agreement to early marriages, in the light of all the constraints involved in domestic work which are so many hindrances to training, literacy, generation of income and improvement of living conditions of women.

By freeing women of some of the most constraining domestic tasks, and by giving each woman and each girl the possibility to use the services of a "Bouran' muso who doesn't speak", a well-managed multifunctional platform can constitute an absolute tool for poverty alleviation in rural areas.

(1) Realised by Mr Moussa DIAGANA for the MLI/99/001 project : Multifunctional Platform for Poverty Alleviation

CONTENTS

INTRODUCTION	4
I - PRODUCTS AND RESULTS OF THE PLATFORM	5
Milling and husking of cereals	5
Crushing of shea nuts	6
Lighting	8
Battery charging	8
Water	8
Welding	9
Financial and technical management of the platform	9
II - IMPACT OF THE PLATFORM ON THE IMPROVEMENT ON WOMEN'S LIVING CONDITIONS	11
Increased conditions	12
Diversification of agricultural production and small trade development	14
Redistribution of income generated by the platform	14
Impact of the platform on saving capacity	15
Impact of the platform on girl's education	15
1 st case study : School of N'Tentou (region of Bougouni)	16
2 nd case study : School of Tendeli (region of Mopti)	17
3 rd case study : School of Anakaga and Ouo (region of Mopti)	18
Impact of the platform on women's participation in public life	19
Impact of the platform on literacy training for women	21
III - WOMEN'S EXPECTATIONS	22
Micro-credit	22
Complementary equipment for the platform	22

IV - MEN'S ATTITUDES, OPINIONS AND EXPECTATIONS	23
V - OBSERVATIONS, QUESTIONS AND GENERAL RECOMMANDATIONS	25
Data bank	25
Feasibility studies	25
Partnership and coordination of interventions with projects and NGO's intervening in the field	26
Girl's education	27
ANNEX	28
Sheet 1 : Women's access to shea nuts picking	28
Sheet 2 : Standard quantity of shea nuts processed per women	28
Sheet 3 : Actual time spent in shea nut manual processing	28
Sheet 4 : Noumoula test on the small scale and mechanical processing of shea nuts	28
Sheet 5 : Marketing of shea nuts	28
Sheet 6 : Platform customers	28
Sheet 7 : Measurement units and prices used in the platform of Lontola	29
Sheet 8 : Price of shea in N'Tentou and Bougouni	29
Sheet 9 : Prices and measurement units at the platform of Watenebougou	29
Sheet 10 : Maourolo / Girl migration	29
Sheet 11 : Tendeli / Income generating activities performed by women	29
Sheet 12 : Maourolo / Income generating activities performed by women	29
Sheet 13 : Kondogola / Income generating activities performed by women	30
Sheet 14 : Sarantomo village/ Actions taken to acquire a platform	30
Sheet 15 : N'Tentou village / Actions taken to acquire a platform	30
Sheet 16 : N'Tentou management committee/ Operators describe thier activities at the platform	30

INTRODUCTION



The Multifunctional Platform Project for poverty alleviation aims at improving the living conditions of populations in four areas in Mali and targets particularly poor women through the introduction of a mechanical and electric energy source in the form of a multifunctional platform. This helps to strengthen the economy through the direct and induced effects made possible by the platform notably thanks to time and energy gains that it provides, and to the increase in income that are derived from it.

Project activities are geared to the needs of various beneficiaries who, through a participatory approach, take the initiative in identifying their needs, in choosing the equipment to be installed and in financially contributing in the purchase and the full maintenance and running costs of these equipments.

Background, objectives and rationale for the study

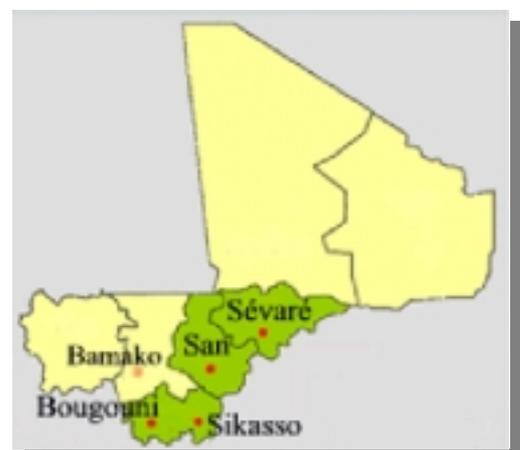
The direct or indirect beneficiaries of the platform are :

- Women managers and owners of the platform
- Women who are clients of the platform
- Village communities, through services provided by the platform (welding, lighting etc...)
- Children, especially girls who are spared from the domestic chores of pounding and therefore can attend school
- Private artisans in charge of making, installing, and maintaining the platform.
- Private service providers (firms or individuals) and traders who are involved in the business of the funding and installing of platforms.

The goal of the consultancy is to identify the impacts of the platform in improving the livelihood of women in the villages.

The consultation was conducted over a period 30 days including 22 days devoted to field work in the project areas covered by the 4 advisory and support units (CAC) of **Bougouni, Sikasso, San** and **Sévaré**.

This study will allow better measurement of the direct and indirect effects of the platform and to strengthen results of activities undertaken as well as the project's methodology.



I - PRODUCTS AND RESULTS OF THE PLATFORM

The products and results of the platform vary according to the different modules set up and services provided, either by substitution in whole or in part of activities traditionally carried out by specific social categories, or by creating new services which did not exist in the village.



MILLING AND HUSKING OF CEREALS

Milling

Apart from the village of Sarantomo (CAC of Sévaré) where a private mill is established, all villages visited practice mechanical milling at the platform level.

Most of the cereals processed (maize, millet, sorghum) are destined to household consumption.

The direct beneficiaries of this activity are women and girls who are traditionally responsible for milling and manual husking by the use of a pestle and mortar, or the grinding stone among the Dogons and Bobos.

MODULES	SERVICES	IMPACTS OF THE PLATFORM IN TERMS OF PRODUCTS OR RESULTS
Milling	Milling : Millet Sorghum Maize Beans Peanuts	⇒ Time saved ⇒ Better quality product obtained after processing ⇒ Reduced loss of flour ⇒ Better food hygiene in relation to the use of pestle and mortar or the grinding stone
Husking	Rice Maize	

The time saved thanks to the use of the platform is one of the most cited results by women in all the villages visited.

With the use of the platform, the aggregate time saved per woman over a week in the processing of cereals (millet, sorghum and maize) amounts to an eight-hour day.

Rice husking

Women who hold individual plots, in the Sikasso region in particular cultivate rice. However, due to its gradual importance in the food habits of people, it is often bought directly in the market as paddy and processed for family consumption, for the reception of visitors and also on important social occasions.

The survey conducted with the women of Lontola for the manual processing of 28 kilos of paddy gave the following results :

- 1) Soaking of paddy : one night
- 2) Steaming : 45 mn
- 3) Soaking : one night
- 4) Drying in the open air : from sunrise to noon
- 5) Manual husking : 8 hours
- 6) Winnowing : 10minutes



A minimum of **48 hours** (2 days and 2 nights) is needed for the manual husking of 28 kilos of paddy.

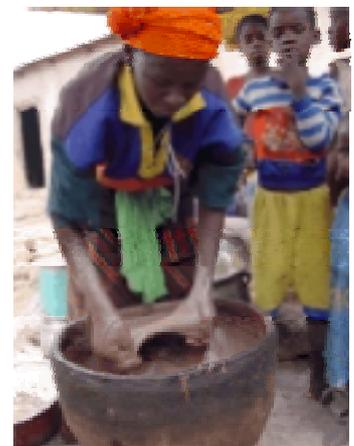
With the platform, all these operations are mechanized and husking of paddy is done in less than an hour.

CRUSHING OF SHEA NUTS

Direct beneficiaries of the activity:

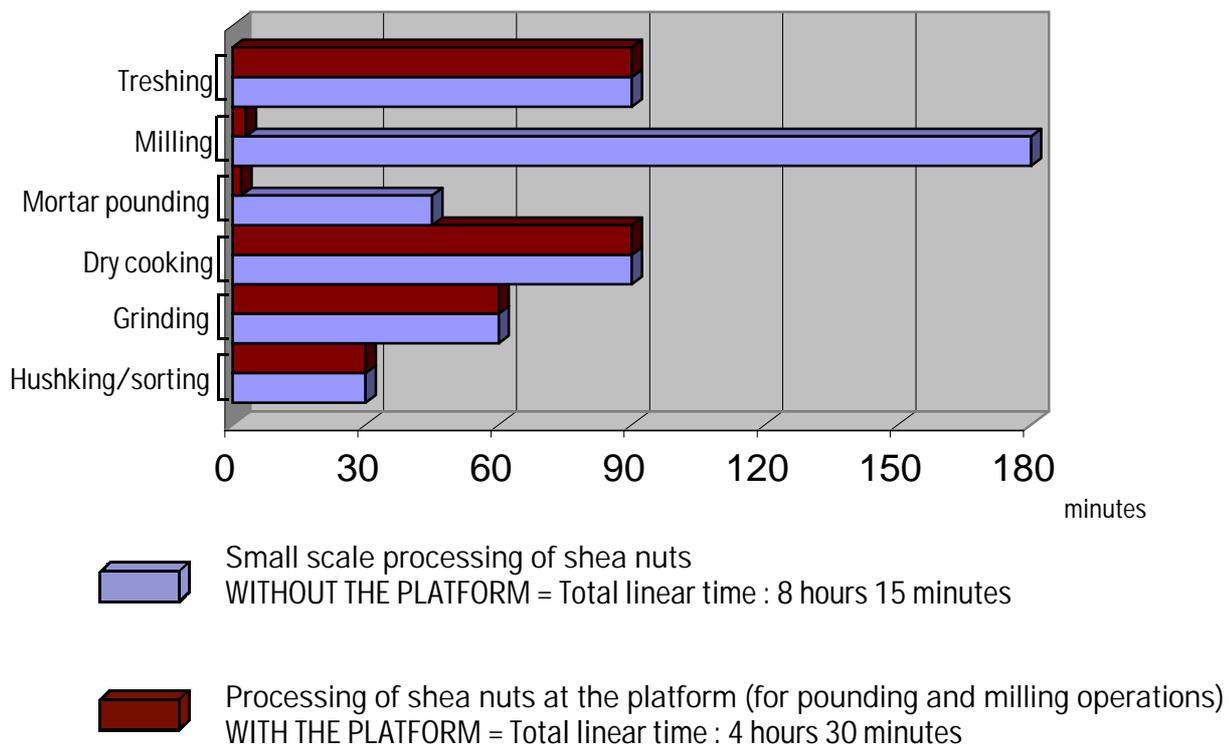
- Women in the shea production areas
- Young girls from 9 to 10 years of age
- Elderly women having more free time for shea nut collection

The “Thiééré” or winnow in osier of a capacity of 10 kilos of shea nuts is the standard quantity that each woman takes to process manually in 5 days. This quantity ensures a constant production of shea butter sold on the weekly market.



MODULE	SERVICES	IMPACTS OF THE PLATFORM IN TERMS OF PRODUCTS OR RESULTS
Crushing	Crushing of shea nuts	<ul style="list-style-type: none"> ⇒ Time saved ⇒ Better quality of shea butter obtained ⇒ Larger quantities of shea processed ⇒ Reduced losses in butter through mechanic crushing

Assessment of time saved in the crushing of shea nuts



The time saved thanks to the mechanical processing which replaced the traditional pounding and crushing is about 3 hours 45 minutes.

Gains made in terms of quantity of butter obtained as a result of mechanical crushing.

Apart from a better quality of shea butter obtained by mechanical crushing, as explained by interviewed women, the test of Noumoula (sheet 4, in annex) has also confirmed the increase quantity of butter obtained through mechanical crushing of shea nut, as compared to manual processing: for 10kilos of shea nuts, 4.5 kilos of butter are obtained versus only 3.5 kilos with the traditional techniques of pounding and manual crushing.

Hence for each “Thiéré” (10 kilos) of shea nuts, the gain in quantity of butter extracted after each mechanical crushing is 1 kilo.

LIGHTING

MODULE	SERVICES	IMPACTS OF THE PLATFORM IN TERMS OF PRODUCTS OR RESULTS
Electric energy	Lighting of platform workshop	⇒ Night use of platform
	Lighting of maternity	⇒ Better delivery conditions

BATTERY CHARGING

Direct beneficiaries :

- Men from the village or neighboring villages, owners of radio and television set.

MODULE	SERVICES	IMPACTS OF THE PLATFORM IN TERMS OF PRODUCTS OR RESULTS
Energy to recharge batteries	Battery recharging	⇒ Power for radio and television sets
		⇒ Reduced transport costs

WATER

Direct beneficiaries:

- Women handling water carrying chores
- Young girls from the age of 8
- Village community



MODULE	SERVICES	IMPACTS OF THE PLATFORM IN TERMS OF PRODUCTS OR RESULTS
Water	Pumping of water into a water tower	⇒ Formation of water reserve
		⇒ Supply of water to neighboring water taps
		⇒ Time saved in drawing water
		⇒ Better hygiene and water quality

WELDING

Direct beneficiaries:

- Men in the village and from neighboring villages, who own farming equipment (plows), transportation means (carts and bicycles) and household furniture (chairs).
- Owners of transport businesses and individuals for car parts in the case of the village of Kondogola located near Cinzana Gare along the Ségou- Bla road.



MODULE	SERVICES	IMPACTS OF THE PLATFORM IN TERMS OF PRODUCTS OR RESULTS
Soudure	Welding of parts : Plows Carts Bicycles Chairs	⇒ Job creation : an artisan of the village sets up a welding business ⇒ Saving in terms of movements and gains in terms of workdays for clients ⇒ Least financial and economic costs

FINANCIAL AND TECHNICAL MANAGEMENT OF THE PLATFORM

Direct beneficiaries:

- **Women who are members of women’s platform management committees**

The platform, as a tool of production and a new technology managed by women, requires for its operation, its management and the organization of activities of the various modules, a new type of know how and work organization which necessitates prior strengthening of operational capacities of women members of the women management committees.



In this way women carry out all the different operations necessary for the functioning and management of the platform: treasures, cashiers, controllers, millers. (see form N°16 in annex)

Mobilization of financial capital

One of the important impacts of the platform is that it generates financial revenues from the monetary incomes obtained from services offered by its different modules.

The processing of the monthly management analysis sheets of the platforms has made possible to record the annual income per village.

Net receipts per years generated by the platforms

CAC	VILLAGES	MODULES	NET RECEIPTS	Number of months/ years
Bougouni	Balanfina	Milling Crushing Hushking Welding Battery charging Water Lighting of platform and ma-	203 990 F cfa*	6 mois / 1999
	Lontola	Milling Crushing Hushking Welding Battery charging Water	340 700 Fcfa *	7 mois/1999
	N'Tentou	Milling Crushing Hushking Welding Lighting of platform	117 345 F cfa*	8 mois/1999
Sikasso	Noumoula	Milling Hushking Crushing Battery charging Lighting of platform	252 000 Fcfa *	11 mois 2000/2001
	Waténébougou	Milling Crushing Battery charging Lighting of platform	302 362 Fcfa *	10 mois / 2001
San	Kondogola	Milling Crushing Welding Battery charging Lighting of platform	275 310 Fcfa *	12 mois/ 2000
	Maourolo	Milling	92 565 F cfa*	12 mois/ 2000
Sévaré	Tendeli	Milling water	46 390 F cfa*	6 mois/ 2000
	Sarantomo	Hushking	158 750 F	12 mois /2000

* Partial annual data

II - IMPACT OF THE PLATFORM ON THE IMPROVEMENT OF WOMEN'S LIVELIHOOD

The impact of the platform is translated in terms of individual or collective opportunities for direct or indirect beneficiaries. These opportunities can be economic, financial or socio-political.

The table below gives an overall idea of these opportunities as cited by women and men of various villages visited:

PRODUCTS AND RESULTS OF THE PLATFORM	IMPACTS
<ul style="list-style-type: none"> • Time saved • Better quality of products after processing • Less loss of flour or shea nuts • Better quality shea butter obtained • Less loss of butter in mechanical crushing • Use of the platform at night 	<ul style="list-style-type: none"> ⇒ Alleviation of domestic tasks and less difficult nature of work ⇒ Increase of the production and productivity of work ⇒ Diversification of activities ⇒ Improvement of income ⇒ Free time ⇒ Improvement of school performance of girls ⇒ Improvement of the quality of life
<ul style="list-style-type: none"> • Food hygiene • Providing better security to deliveries at night • Water quality 	<ul style="list-style-type: none"> ⇒ Improvement of health
<ul style="list-style-type: none"> • Mobilization of financial resources • Technical and financial management of platform by women 	<ul style="list-style-type: none"> ⇒ Job creation within the WMC (Women's Management Committees) ⇒ Acquisition of technical skills within WMC ⇒ Acquisition of financial resources for women's associations ⇒ Participation of women in the public life of the village

In all the cultural areas covered by the project, women are assigned domestic tasks in family units beginning at age 8 (as a girl then as a daughter in law after their marriage) and they are freed from these tasks only when they in turn acquire the status of mother in law.

These status and roles being shared by all women in village communities, the development strategies of all actors will be mainly determined by modes of access to land resources.

Three scenarios appear in the area covered by the project :

- Women who have access to individual farms and who don't perform services in the family farm.
- Women who have access to individual land plots and who also perform services in the family farm.
- Women who don't have an individual farm and who perform services in the family farm.

In the three cases, the time saved thanks to the platform allowed women : to spend more time maintaining their individual farms, to increase and diversify their farm production and finally to develop small trade through the purchase and resale of agricultural, fishery products and the preparation and resale of various condiments.

INCREASE OF PRODUCTION

Impact of the platform on the production and the processing of rice

To the extent that the availability of farmland and rainfall permits it, the amount of time saved by women in activities for the processing of cereals and shea nuts has had two major effects for women in the regions of Sikasso and Bougouni :

- ⇒ The increase of planted areas in the individual farms of women has allowed to double, sometimes triple their rice production.
- ⇒ The increase of the number of women farming rice on personal farms. Before the installation of the platform, rice farming was mostly performed by women dispensed from domestic chores (women who have daughters-in-law and having more time) due to the requirements of the activity and the remoteness of the farming areas. With the installation of the platform and the resulting time saved, women from the category "in charge of cooking" were able to either engage in rice farming, and in case where they had been practicing this activity, to increase their production.



The average annual production per woman in a normal year of rainfall increased from 275 kilos to 600 kilos of paddy after the installation of platforms!

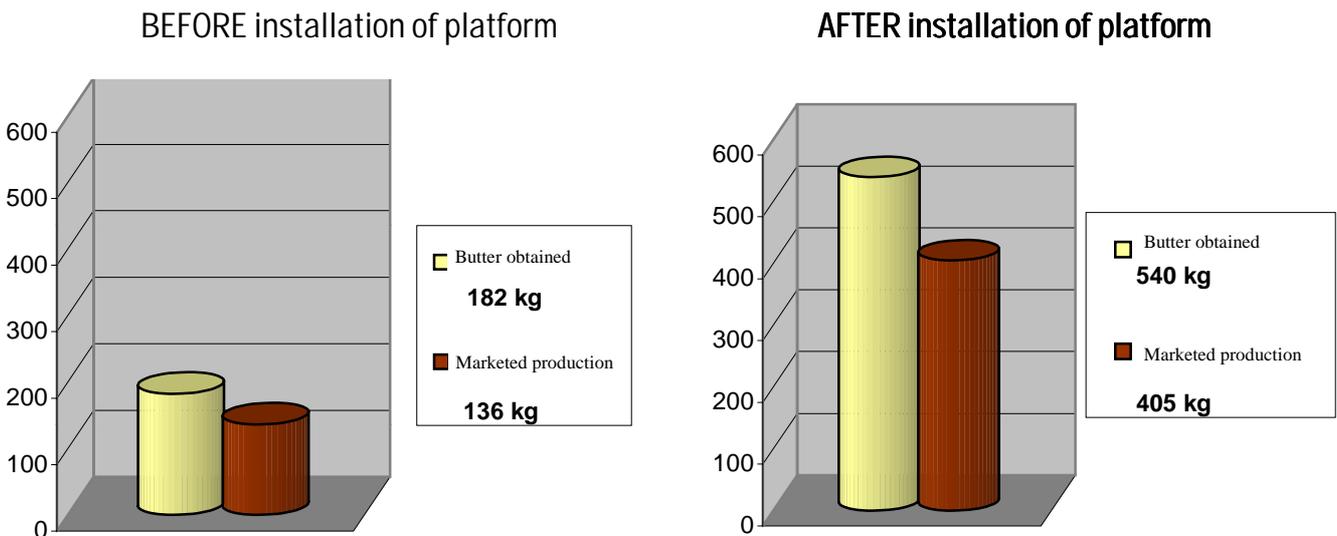
Half of this production of paddy is directly marketed at 12,500 F CFA per bag, **i.e. a monetary income of 50,000 CFA per campaign and per woman.**

The remaining half, about 300 kilos, is used for household consumption.

Shea butter production, processing and marketing

Surveys conducted with a sample of 10 women of Balanfina who produce shea butter out of the annual productions and incomes from shea butter and from the processing of a quantity of 10 kilos of shea nuts (1 thiéré).

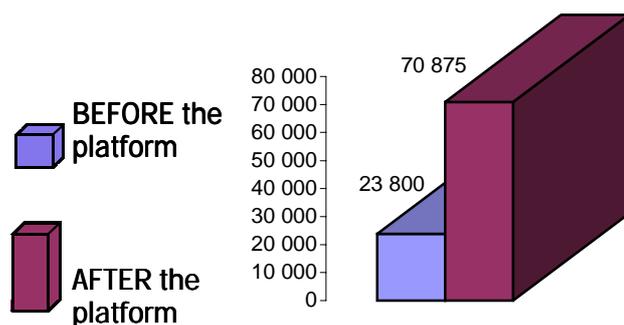
SHEA BUTTER PRODUCTION



We notice, on the basis of information supplied by women, a sizable increase of the production of shea butter which brought with it an improvement of income derived from the marketing of butter resulting from mechanical crushing.

Mechanical crushing in fact allows not only to process, in a given time span, a larger quantity of shea but also to have a better quality paste from which a greater quantity of butter is extracted (see results of test in Lontola, sheet 4-Annex)

Annual income per woman in CFA francs



According to the testimonies of women producing shea butter in the villages of areas covered by CAC of Bougouni and Sikasso, the mechanization of crushing and milling operations has helped tripling the production of shea butter.

DIVERSIFICATION OF THE AGRICULTURAL PRODUCTION AND DEVELOPMENT OF SMALL TRADE

Three indicators permit to appreciate the impact of the platform on the diversification of the production and the development of small trade:

- Indicator of weekly markets attendance

The survey conducted in Tendeli (CAC of Sévaré) shows a strong increase in attendance of the weekly markets in neighboring villages by women from Tendeli: 1 to 2 markets attended per week before the platform, 5 to 6 markets since the establishment of the platform. The reasons given by women are the reduction of domestic works and the increase in the volume of income generating activities.

- Indicator of bus stops for transportation

In Noumoula (CAC of Sikasso), and before the establishment of the platform, the bus for the Zaniena weekly market did not stop because of the lack of clients. Since the establishment of the platform, a bus stop is established due to the number of passengers.

- Increase in quantities of husked rice sold

In Sarantomo (CAC of Sévaré), the rice mechanically husked is more appreciated by the clientele because of its best quality than the paddy manually husked. For women, this is translated by the purchase of more important quantities of paddy in the view of its resale after husking at the platform.

REDISTRIBUTION OF INCOMES GENERATED BY THE PLATFORM:

A relatively important amount of money is redistributed to women operators of the platform in the form of weekly salaries. The importance of these salaries is variable; and depends on the volume of activities, the types and number of modules established, the importance of the clientele and the operational state of engine and equipment.

Village	Year	Nbr of months	Nbr of women operator*	Allowances
Balanfina	1999	6	N/a	238 130
Lontola	2000	12	10 + 3 men	515 960
N'Tentou	1999	8	7 + 1 man	133 080 F
Noumoula	2000-01	12	4 + 1 man	94 910 F
Watenébougou	2000-01	10	10 + 1 man	142 615 F
Kondogola	2000	12	10	328 325 F
Maourolo	2000	12	7	74 420 F
Sarantomo	2000	12	6 + 1 man	277 976 F
Tendeli	2000	6	6	62 145 F

* Men are generally employed as millers

The high number of women operators is linked to the necessity for women to practice a rotational system which enables them to reconcile the necessity of a permanent presence at the level of the platform with the requirements of their daily schedule.

However, given the importance, at the village level, of the amount of money redistributed under the form of allowances, the choice of operators and mainly their relatively high number is also often dictated by the different families or lineage segments in the village in order to ensure an equal redistribution of resources generated by the platform.

IMPACT OF THE PLATFORM ON THE MOBILIZATION OF SAVINGS

In the areas covered by the CACs of San and Sévaré, where the monetary poverty of women is more marked mainly because of their limited access to agricultural resources, the revenues drawn from the exploitation of platforms are placed in village savings and credit funds.

These villages are also marked by a strong migration of girls toward urban centers where they work as maids. The main reason for these migrations is the impossibility for women to provide, as the tradition requires, for the wedding trousseau of their daughters given their low monetary incomes.

⇒ Thus the existence of village savings and credit banks constitutes for the women of these villages, a way to access to financial resources under the form of small credits enabling them to initiate or develop income-generating activities.

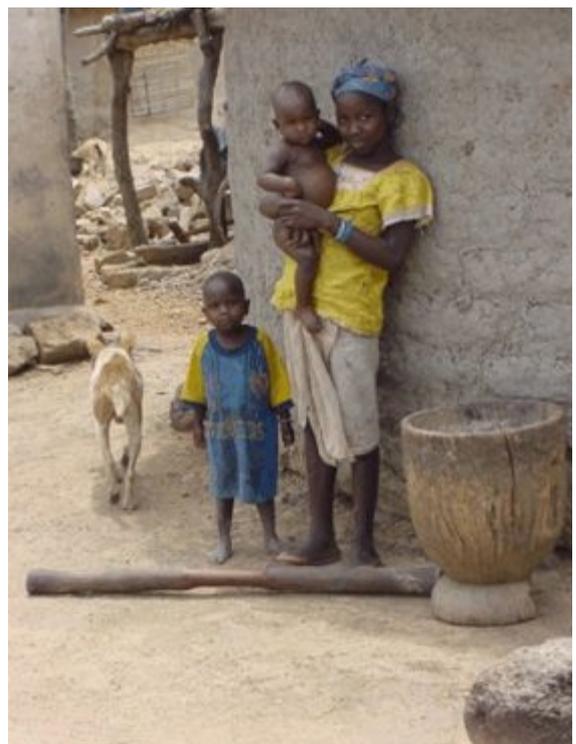
The money generated by the platforms is placed in funds at fixed dates with an interest rate of 3 percent. The women management committees, however, cautiously keep at their own level the funds necessary to cover the current expenses linked to the operation of the platform.

IMPACT OF THE PLATFORM ON GIRL'S EDUCATION

Girls handle domestic chores (cereals grinding) generally from age eight (8) and even earlier for water carrying.

With regard to school, boys are luckier in the sense that they are not submitted to domestic chores but rather to agricultural activities (in the rainy season) which coincide with the period of school vacations.

In all the villages visited where a school exists, both parents and teachers emphasized the positive effects of the Platform on the reduction of the volume of the domestic chores of girls.



Thus, the following factors have been cited by teachers as being the direct cause of the improvement of girls' school performances since the establishment of Platform :

- ⇒ Fewer delays for girls who are no longer subjected to early morning duties; i.e. pounding and drawing water before going to school.
- ⇒ A more regular presence of girls in courses, their mothers not retaining them the whole day at home in order to help them in case of overloading of domestic tasks on the occasion of certain family ceremonies.
- ⇒ Girls are less tired when they arrive at school.
- ⇒ The reduction of domestic tasks enables them to dedicate more time to revise their lessons or do their homework.
- ⇒ The increase in women's revenues since the establishment of the platform (in particular in the Bougouni-Sikasso areas) has enabled these women to invest part of their new income in their children's education (purchase of school supplies).

In order to check and confirm these remarks which constitute important factors for the improvement of girls' school performances, three cases have been studied in order to isolate the effect of the platform as an important factor:

Case 1 :
(Region of Bougouni): the N'Tentou village school where the platform was established in 1997.

Comparative analysis of the evolution in boys and girls' school performances over two (2) schools years before and two (2) school years after the establishment of the platform

Performance indicator :
Passing to a higher class

Case 2 :
(Region of Mopti): the Tendeli village school where the platform was established in July 2000.

Comparative analysis of the evolution in boys and girls' school performances for one school year before the establishment of the platform and one school year after its establishment.

Performance indicator :
Average scores obtained in evaluation tests

Case 3 :
(Region of Mopti) : the Ouo village school and the Anakaga village school.

Comparative analysis of boys and girls' school performances in two (2) different villages among which one, Anakaga, is endowed with a platform and the 2nd the focus village Ouo has no platform.

Performance indicator :
Passing to a higher class

Results of the surveys:

Case 1: N'Tentou School

- For the two school years 1994-95 and 1995-96 which preceded the establishment of the platform, the boys' achievement rates (passing to higher class-all classes involved) are higher than those of girls.

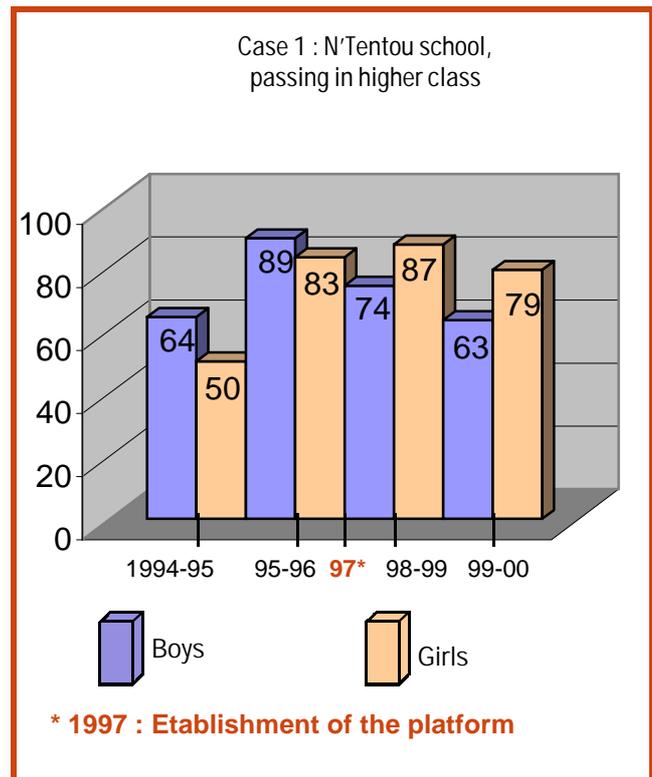


We notice that before the establishment of the platform, boys' performances are superior to those of girls with a gap of 14% for the 1994-95 school year and 6% for the 95-96 school year.

For the two school years after the establishment of the platform, we notice a change in the achievement rates in favor of girls.

- 98-99 School year: 87% of girls pass to higher classes versus 74% of boys only.
- 99-2000 School year : Girls' achievement rates always remain higher (79%) than boys, (63%)

⇒ **Girls' performances are higher than those of boys with a gap of 13% over the school year 98-99 and of 16% over the school year 99-2000.**



Case 2 : Tendeli school

⇒ The platform was established in July 2000.

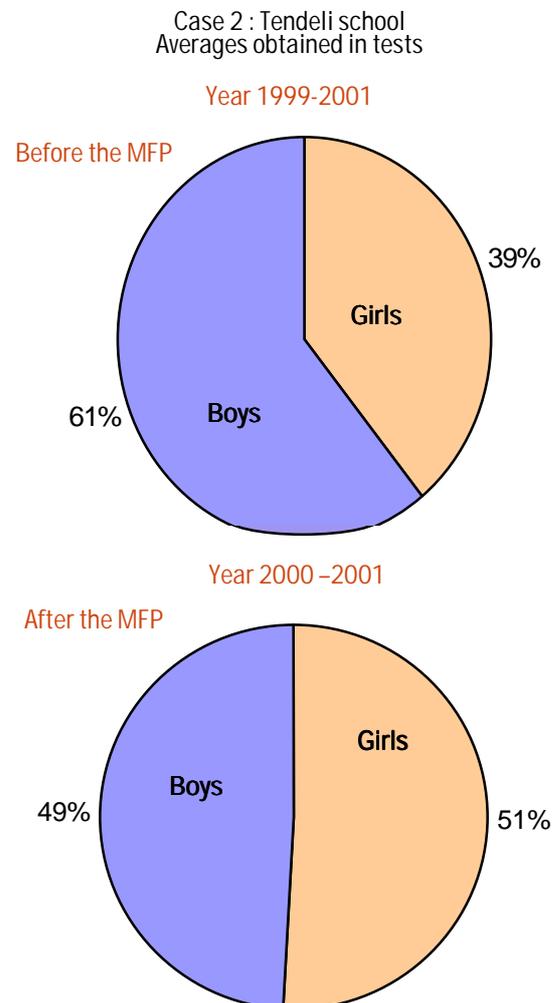
The comparison between pupils' grades (girls/boys) before and after the establishment of the platform gives the following results which confirm the positive and immediate effects of the platform on girls' school performances:

- For the school year 1999-2000 (before the establishment of the platform), 64% of boys eat the average versus only 41% of girls.

Boys' school performances are higher than those of girls with a gap of 23%.

- For the school year 2000-2001 (after the establishment of the platform in July 2000) the trend has changed in favor of girls: 73% of girls have the average versus 71% of boys.

⇒ **Girls' school performances are, after the establishment of the platform slightly higher than those of boys with a gap of 2%.**



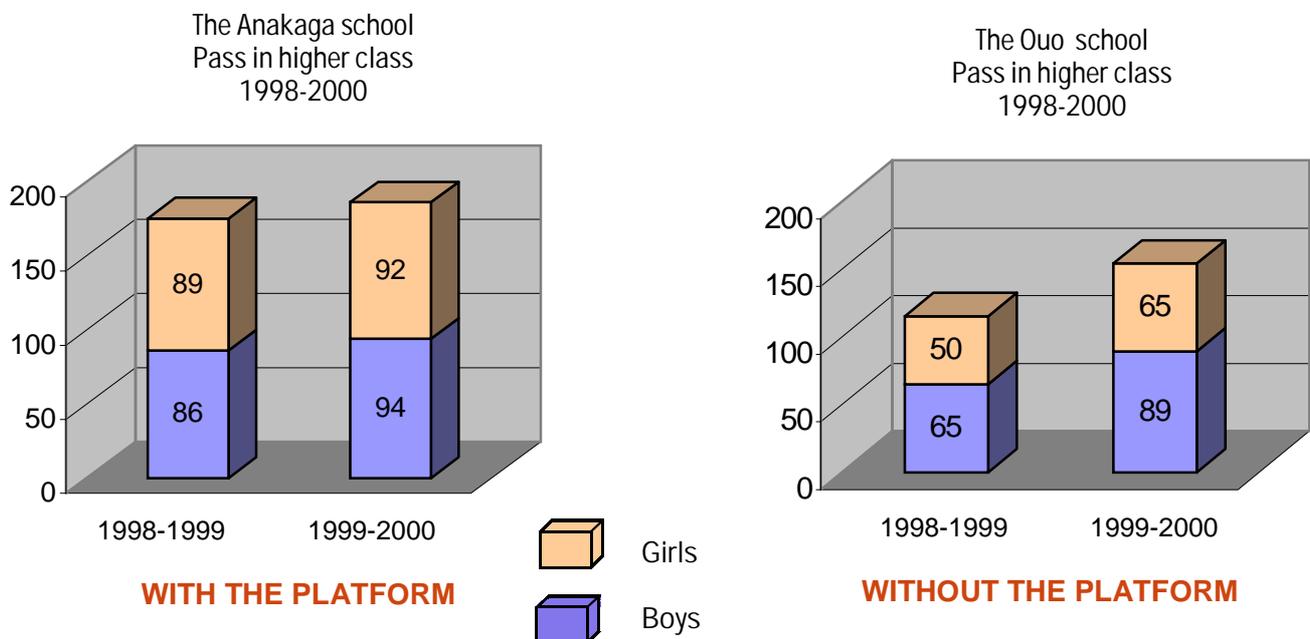
Case 3: Anakaga School and Ouo School

Comparative analysis from the indicator of passing in higher class, of girls and boys' performances in two villages among which one is equipped with a multifunctional platform established in 1998 : the Anakaga village and the other one without a platform: the Ouo village.

Two years of reference were chosen for the survey : The school years 1998-99 and 1999-2000.

Results:

We notice in these two villages located in the same cultural and geographical area (Dogons) that girls' school performances in the village of Anakaga with a platform are far better than that of the village of Ouo (without a platform).



Thus, for Anakaga which has a platform, the achievement rates of girls and boys are relatively the same :

- School year 1998-1999 : the achievement rates (passing in higher class) are of 86% for boys and 89% for girls.
- School year 1999-2000: boys' achievement rates are 94% versus 92% for girls;

In the case of Ouo, a village without platform, we notice a sharp difference between girls' school performances and those of boys during the same period of reference:

- School year 1998-99: 60% of girls pass in higher class versus 38% of girls only (with a gap of 22%).
- School year 1999-2000: 89% of boys pass in higher class versus 62% of girls (with a gap of 27%).

IMPACT OF THE PLATFORM ON THE PARTICIPATION OF WOMEN IN PUBLIC LIFE

It is the combination of three factors consecutive to the setting up and operation of the platform which has had a direct effect on the participation of women in the public life of the village: the financial factor, the technical factor and the approach and the intervention modes initiated by the project for the acquisition and management of platforms by women.



- **The financial factors:** the income generated by the platform have permitted women's organizations to build up a relatively important financial capital enabling them to intervene in the development of the village (in some villages the resources of the platform constitute the greatest source of income).
- **The technical factor :** The platform with its multiple functions does not represent just one advantage for women. Thus, the establishment of some modules such as the welding and battery charging device directly benefit men in terms of services. Other modules such as water and public lighting benefit to the entire village community.
- **The project approach :** The modalities of acquisition of the platform and its technical and financial management make women unavoidable interlocutors in particular with regard to the organization and operation of different modules and the management of resources they generate.

The combination of these 3 factors has had a direct consequence which is to get women involved in the circle of official decision makers at the village scale which cannot be done without their official integration in the existing decision making bodies and mechanisms within their respective communities



Thus the **“Musokoroba”** women with an important social rank and an age which confers on them the authority and the right to speak in village assemblies, are generally “put forward” as chairwomen of associations or female management committees or sometimes as “Godmothers” of associations.

Usually, they do not receive adult literacy training but this does not mean that they are not efficient in the following intervention domains:

- ⇒ Internal negotiation phases with village councils for the establishment of the platform,
- ⇒ Management of conflicting situations likely to occur between female management committees and the village around the management of some modules,
- ⇒ Management of resources generated by the platform.

Young women who have received adult literacy training or semi schooled constitute the core of the system set up because of their instruction and the technical training which are indispensable for the technical and financial management of the platform. They assist the oldest women or women who do not receive the adult literacy training in the accomplishment of their work/functions in particular treasurers for the accounting.



The organization structures set up will be sustainable to the extent that some intervention principles adopted by the project and related to the training and the setting up of female management committees are observed.

The approach initiated by the project meets the following criteria of sustainability which have been confirmed in the framework of the study.

- **Technical criteria**

Professional training and adult literacy training of women management committee's members: Twenty women designated by women associations have been trained and educated per village which permits to ensure a certain flexibility in the selection of operators according to criteria of competence as well as social criteria appropriate for each village.

- **Political criteria**

The presence in WMC or most often head of women associations of old women whose voices count at the village scale.

- The political and social recognition of women by men through the establishment of bridges between village councils and WMC.

- **The Social criteria**

The organic rooting of WMC in the village social tissue: Each family has one representative within the WMC which enables :

- To maintain balance between different ethnic groups or extended families,
- To disseminate information on the operation of the platform without using general assemblies,
- To get access to a balanced redistribution of financial gains of the platform through jobs created within women's management committees,
- To guarantee social cohesion.

-

IMPACT OF THE PLATFORM ON THE ADULT LITERACY TRAINING OF WOMEN

The technical and financial management of the platform involves necessarily the literacy training of women who are its operators and therefore need to read and write .

The approach initiated by the project consists in training, twenty women in each village, designated by women associations among whom the future platform managers are chosen (*cashiers, millers, treasures, controllers etc..*).



Besides the fact that this method ensures flexibility in the selection of operators, taking into account criteria of competence as well as specific social criteria for each village, this approach has the advantage to educate, a relatively important number of women in each village beyond the platform operation needs. Women of 25 to 35 years old are those who have benefited the most from these literacy-training programs.

III - WOMEN'S EXPECTATIONS

The opportunities offered by the platform in terms of diversification of production activities, income-generating activities and in terms of more frequent access to local markets have also created important financing needs for these activities under the form of micro credit.

THE MICRO CREDIT SCHEME

At the level of most of the women members of associations an expectation exists for funding activities with resources thanks to incomes generated by the platform. However, and for obvious reasons of management, it is difficult in the current phase to satisfy such a demand (most of the established platforms being in their first or second year of operation). Indeed, apart from villages where savings and credit funds exist in which half of the resources of platforms are placed, internal mechanisms of micro credit do not exist to cover the costs related to maintenance, repairs, purchase of new (modules) equipment and payment of debts. The monetary needs of women remain however important, and are even increased with the establishment of platforms thanks to the development opportunities they offer. Traditional mechanisms of existing credits (tontines) do not permit, due to the weakness of the amounts they can offer, to meet on one hand the increasing needs of funding individual or collective activities of women and, on the other hand, to impulse a real development of private women promoters mainly in successful production channels such as the processing and the marketing of the shea butter (Sikasso and Bougouni areas) and fishing products (Sévaré area).

EXTRA EQUIPMENT AT THE LEVEL OF THE PLATFORM

The welding post constitutes one of the most important demands of women in villages where platforms are established and which are not provided with it. Men are the direct recipients of this equipment. Besides the pressures exerted by the latter on women for the establishment of welding posts but also for public electrification, women have a strong will to provide their platforms with equipment to which men can relate to.

In fact, we notice that the more the equipment established on a platform involve activities or services dealing with all the categories of the village community, the more men recognize the place and the importance of the platform in the village. This recognition is accompanied by a reinforcement of the position of the Women Management Committees in the village through; by stronger relationships with village councils, the assistance and the personal support of the village chief to serve as a relay with external partners; (for the mobilization of village labor in case of important works to be done at the level of the platform workshop for the mobilization of financial resources in case of unexpected expenses at the level of the platform, for the transfer of platform resources at the bank etc.)

IV - ATTITUDES, OPINIONS AND MEN'S EXPECTATIONS

Men's attitudes regarding the establishment of the platform in villages are translated in terms of opinions, expectations and implications which can be classified into three categories:

Men's implication in the establishment of platforms:

Men have been closely associated by women for the establishment of platforms mainly through:

- The village councils for helping the WMC to formulate their demand, the participation in the capital costs in the form of grants or credits, the identification of a site in the middle of the village to receive the platform.
- Youth associations for the construction of small houses hosting platforms.



Attitudes regarding services offered by the platform

There is a particular interest of men for the installation of modules such as the welding post, the alternator for battery charging, public lighting for which they are the first recipients.

In villages where these equipment in particular the welding post, are established the main advantages obtained by men owning agricultural equipment are:

- Travel savings;
- The time saved in terms of workdays thanks to the proximity of the welding post and battery charging.

Men's opinion on the effects of the platform

- Cooking meals in time,
- Better quality of meals,
- Reduction of conflicts between men and women (meals not ready in time)

- Reduction of conflicts between co-spouses, between mother in law and daughter in law, between mothers and daughters around the internal distribution of domestic tasks.

Men agree that women have individually acquired a certain financial autonomy with the establishment of the platform. However, because these individual resources generated from extra-family activities are relatively autonomous with regard to the family budget they directly manage as family chiefs, they perceive less their importance although an important part of these incomes is reinvested in the family.

On the other hand, the financial impact of the platform through the direct resources generated by its activities is well perceived because of the existing bridges between WMC and village councils and it is frequent to see the latter appeal to women associations for credit and for funding of other activities : purchase of medicines, welcoming guests etc...



All the men interviewed perceived mainly the amount of time saved by women thanks to the platform in food and marital terms.

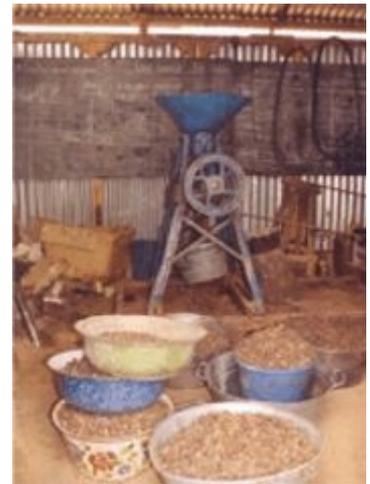
V - OBSERVATIONS, ISSUES AND GENERAL RECOMMENDATIONS

DATA BANK

Data and information collection on cereal consumption

Because all the cereals consumed daily by households pass through the platform, the multifunctional platform constitutes an important tool for data and information collection on the production and cereal consumption as well as on the food habits and behaviors of households :

- Quantities and types of cereals consumed per village and per home
- Seasonal variations in quantity and type of cereals consumed,
- Food habits from one area to another and their evolution.



⇒ These data could be exploited by governmental services through the project and the basis of a sample of villages per intervention area of the project.

Data on the amount of time saved per workday following the establishment of the welding post

The maintenance and repair of agricultural equipment (plows) constitute a major constraint during agricultural activities in most villages.

In fact, in the absence of welding workshops in villages, movements are frequent in district centers or within villages which are provided anything that provokes according to distances to cover, important losses of time per workdays.



⇒ The time saved per workday with the establishment of the platform could be computed by default according to the number of plows repaired at the level of the platform during an agricultural campaign.

FEASIBILITY STUDIES

The feasibility studies constitute for the project an important decision making tool for the establishment of a platform in a requesting village.

The critical analysis of these feasibility studies shows however, some possibilities for improvement.

Beyond socio-economic and demographic information on the villages concerned, it appears that the decision-making of the establishment of a platform leans much more on the provisional operating account of the platform based mainly on the constitutive indicators of the number of expected clients.

Because the clientele is female at 99% and because it's women not their husbands who pay for services of the platform (see note n°6 – Annex), the capacity to cover daily expenses related to the use of these different services will depend on women's solvency and, therefore, on monetary incomes generated from their extra-household activities.

The indicator on expected clients, identified from a participatory method and which is related to the expression of the desire and the declared capacity of a certain number of women to use such or such a given service of the platform, is relatively subjective and can have only a punctual value (during the conduct of the study) and not a prospective one.



Knowing that for certain parameters linked to the operation and maintenance of the platform (Price of gas-oil, oils, and provisional maintenance costs), the medium term trend is on the rise, **it is important that the feasibility studies point out the real and expected monetary incomes as well as their frequency in order to better appreciate their financial capacities to cover these costs in addition to the expressed will.**

Such an approach may facilitate answering some of the following questions:

- ⇒ What would the clients' behavior be in case the price of gas go up and up to what amount can women's budgets support an increase in the prices of services in the platform ?
- ⇒ What would the behavior of women shea butter producers be in case of increase in the crushing prices which are not accompanied by an increase in the prices of shea butter ?
- ⇒ Up to what amount could women's budgets support a rise in prices in the platform without noticing a return back to the manual milling, husking and crushing ?

PARTNERSHIP AND COORDINATION OF INTERVENTIONS WITH THE PROJECTS AND NGOS OPERATING ON THE GROUND

The development opportunities created with the establishment of the platform must be monitored and supported by actions aimed at the improvement of women's living conditions and the increase in their monetary incomes.

Financial means and human resources of the project can only partially meet population requirements in the areas involved it is necessary to initiate an information and advocacy approach to the impact and effects of the platform on local and central partners (projects, NGOs, government technical services) in order to promote concerted actions towards women in the villages equipped with the platform.

GIRL'S EDUCATION

Efforts made by the Education Department and development partners are aimed at encouraging girl's education particularly in the Mopti region .

However, even with equal levels of enrolments for girls and boys, girl's performances are lower than those of boys during their schooling and their school failure rate and dropout is higher – **the main cause of this phenomenon** (which challenges all the efforts made by public authorities to encourage girl schooling) **is the excessive domestic work they are facing every day.**



The installations of platforms in villages where primary schools exist demonstrate the immediate effects on the improvement of girls' school performance which has equaled if not passed that of boys.

It is important on the matter that information and advocacy must be carried out towards the department of education and development partners in order that concerted actions should be run with the project in order to develop an initiation policy of platforms in the villages where school exists to improve the girl school performances.

For further information please contact :

The Multifunctional Platform in Mali

Mrs E. Niang Kourouma
 DNI / BP 278 - Bamako - MALI
 Phone : (223) 22 57 56 - 75 42 20
 Fax : (223) 22 61 37
 dnplateforme@datatech.toolnet.org
 Web site : www.ptfm.net

The Multifunctional Platform Regional Cell

Mr Laurent Coche
 PNUD / BP 120 - Bamako - MALI
 Phone : (223) 22 01 81 - 75 08 04
 Fax : (223) 22 62 98
 Email : plateforme@cefib.com
 Web site : www.ptfm.net

ANNEX

These forms are the result of surveys conducted in the area.

SHEET 1: MODE OF WOMEN'S ACCESS TO THE PICKING OF SHEA NUTS.

Women's access to the resource is ensured according to 2 types of shea collecting

- Wild picking which consists of gathering nuts from trees located outside family farms.
- Rights to gather nuts stemming from trees within family farms. This right is preserved in priority for women in the family. In case of polygamist families and according to the conjugal rotation system it is the women doing the family work and who takes the meal to the field to their limbs and use their rights to pick the fruits.

SHEET 4: TEST IN NOUMOULA ON THE LOCAL AND MECHANIC PROCESSING OF SHEA NUT

The processing of a thiéré of Shea nuts (10kilos) has given the following results:

Quantity of butter extracted after manual processing (all operations): 3,5 kilos of butter.

Extracted quantity of butter after mechanic processing (breaking: 4,5 kilos).

SHEET 2: STANDARD QUANTITY OF SHEA PROCESSED BY WOMEN

"The thiéré" basket of 10 kilos of shea nuts is the standard unit of measurement used by women in all villages.

SHEET 5: MARKETING OF SHEA

Estimates of women of both Balanfina and Lontola : a quarter of the shea butter is for family consumption- the $\frac{3}{4}$ are destined to be marketed.

SHEET 3: REAL TIME IN SHEA PROCESSING

The local (artisan) processing(manual) of operations goes along a period of 5 days for a standard quantity of 50 kilos of shea (one thiéré) per unit of work by women or girls of 10 years of age. This length of time allows to produce according to weekly market of Yanfolila: 3,5 kilos (see the test in Noumoula).

SHEET 6: CLIENTS OF THE PLATFORMS

99% of the clients of the platforms are women. The costs for grinding, pounding, husking of shea are the responsibility of women for products destined for family consumption or for their own products or those allocated for marketing. Men pay for the costs of grinding, husking concerning the parts of their production reserved for marketing or ceremonies accompanied with collective foods (mutual aid in family farms) They mostly constitute the main client for welding works and battery charging.

SHEET 7: UNIT OF MEASURE USED AND PRICES AT THE LONTOLA PLATFORM

Units of measure used

A big pot of tomato equivalent to 1,800kilos of shea and 1,600 kilos of cereals.

Unit prices :

Grinding of shea nuts: 40 FCFA

Milling of cereals: 25 FCFA

Rice husking: 35 CFA

Energy sale: 1,500FCFA/hour

SHEET 8: PRICE OF SHEA IN N'TENTOU AND BOUGOUNI

Shea nuts: sold 30 Fr/kilo in the villages

Sold 50F delivered in Bougouni

Resold 125/kilo in Bougouni by brokers

Shea butter : 150F to 200F/kilo in the village according to the period of year.

250 F to 300 F/kilo in Bougouni with brokers.

SHEET 9: PRICES AND UNITS OF MEASURE AT THE PLATFORM OF WATENEBOUGOU.

Units of measure :

Large pot of millet: 3.400kilos

Small pot of millet: 1.900kilos

Shea nuts:

Large pot: 2.800kilos

Small pot: 1.600kilos

Unit prices:

Milling: 25 F

Grinding: 75F

Small pot of tomatoes:35F

Prices of butter in the market of Yanfolila: 175 FCFA

SHEET 10 MAOURLO: MIGRATION OF GIRLS

Of 10 women at the meeting with the CFG 8 have migrated in urban centers to look for a monetary income for preparing for their wedding trousseau.

SHEET 11: Tendeli / EXTRA FAMILY ACTIVITIES BY WOMEN

- cotton spinning
- small trade
- trade of fish(bought in Mopti: 2 or 3 women)
- marketing of shallot
- millet beer sale
- sale of cotton
- sale of pepper
- sale of oil
- sale food items (local bread, peanuts, paste, cakes)

SHEET 12: MAOURLO EXTRA FAMILY ACTIVITIES BY WOMEN

- millet beer sale
 - processing and sale of honey
 - making of (acacia balls)
 - sale of soubala
 - sale of tobacco
 - sale of peanuts
 - sale leaves of sorrel
- Small livestock breeding and sale of pigs
- collective farm of women for farming of millet and peanuts
 - women working in men's farms (300 FCFA/ a day)
 - making of soap from pourgher (project)

SHEET 13: ACTIVITIES CARRIED OUT BY WOMEN

- F1: processing of shea nuts
- F2: assistant seller of fresh fish
- F3: preparation/sale of food pastes
- F4: sale of wood
- F5: sale of peanuts (large quantities since installation of PTF)
- F6: working in individual farms (more time spent in farms since installation of PTF).

SHEET 14 : SARANTONO VILLAGE : ACTIONS TAKEN TO ACQUIRE A PLATFORM

The idea to acquire the platform stems from the experience of a neighboring village located at 5 km. After a visit to the platform of this village, we formed a delegation made of 2 women and one man and we contacted the project.

Funding of the PTF:
monthly contribution of 250 FCFA for all women of the village.

SHEET 15

VILLAGE OF N'TENTOU : ACTIONS TAKEN TO ACQUIRE A PLATFORM

N'TENTOU

Installation of the platform

Women of the village talked to the village council to express their need for a platform in the village: approval from the village council who delegated one of its members to support them.

Provision by the village council of a land plot for the installation of the PTF.

The representative of the council attends all meetings of the CFG.

SHEET 16: MANAGEMENT COMMITTEE OF N'TENTOU: DESCRIPTION OF ACTIVITIES BY OPERATORS AT THE PLATFORM

Miller: cleaning

Greasing

Checking of oil and fuel levels

Start of work

Noon break

Keeping of the miller's sheet

Controllers (women) (6 controllers each representing each of the 6 large families)

Cleaning of PTF

Weighing of cereals or shea nuts to be processed

Indications of prices to be paid according to the quantity

Meeting at end of the week

Cashier:

Cashing of corresponding amounts after indications of the price by the controller

Counting the number of clients and recipients

Counting the corresponding tickets

Payment of the daily receipts to the service controller

Maintaining the ticket book

Maintenance of client register.