



# NEMA-CHOSSO IN THE GAMBIA

Delivering Outcomes, Reducing Poverty  
Highlight of Success Stories







## Message from Momodou L. Gassama, Nema-Chosso Project Director

Welcome to the second series of short stories of Outcomes delivered from the implementation of the National Agricultural Land and Water Management Development Project, Nema. Through these publications, we share stories of how Nema Chosso is contributing to changes in the lives and livelihoods of people, mainly women and youth in rural Gambia.

The project is a reflection of the continued engagement of the International Fund for Agricultural Development (IFAD) and Government of The Gambia (GoTG) to invest in poor rural people. It reflects a sustained partnership between IFAD and the Government of The Gambia to consolidate investments in rural and agricultural development in the country over the last 2 decades. The development goal of Nema is to reduce poverty of rural women and youths by increasing incomes from improved productivity based on sustainable land and water management practices.

Over the past 5-years, the project team has worked earnestly with beneficiaries and our partners to deliver key results such as improved access to productive land for rice farming, tractor ploughing services to reduce the drudgery of labor and enhance lowland rice productivity and increased access to fertilizer and improved seed for rice farmers across the country. In this publication, we share true life stories of the effects of these investments on the lives and livelihoods of project beneficiaries.

This publication is the product sustained partnership as well as the engagement of the project team, our implementing partners and esteemed beneficiaries. The IFAD Country Director, Mrs. Haoua SIENTA and her colleagues at IFAD continue to provide guidance for project implementation the inception of Nema-Chosso. At the country level, officials of the Ministry of Agriculture continue to provide strategic guidance through its Central projects Coordination Unit. We continue to be highly appreciative of the collaboration and true partnership we enjoy with the West Africa Rural Foundation (WARF). My sincere appreciation and thanks also go to my colleague Project Coordinators and Directors under the Ministry of Agriculture and beyond.

Please Enjoy Our Short Stories



**EMPOWERING GAMBIAN WOMEN FARMERS  
THROUGH INCREASED ACCESS TO PRODUCTIVE  
LAND FOR RICE FARMING**



## BACKGROUND / CONTEXT

In The Gambia, women clearly dominate crop production in the lowlands. Rice and vegetable production are the principal livelihood sources for the overwhelming majority of these farmers. They work almost exclusively in tidal and rain-fed lowland ecologies. Large areas of lowland are poorly developed and lack basic infrastructure for improved farming. One consequence of this is that women rice and vegetable farmers exploiting the lowlands rely on traditionally unproductive cultivation practices, resulting in low yields and farm revenues. The average lowland/swamp rice yield ranges stands at less than 1 ton per hectare across the country (2017 National Agricultural Sample Survey, Abridged Version). Data from the same source also shows that overall rice production is lower than 25% of the production target under the country's current National Development Plan. Whilst current performance remains worrisome, it must be noted that opportunities exist to significantly increase rice yields with improved infrastructure and land development.

Investment in improving the performance of lowland ecologies across the country has a huge potential for direct positive effects on the socioeconomic status of rural women as well as the overall nutritional status of rural households. Providing women access to more productive lowlands that will improve yields and overall production, which will translate into increased food and nutrition security for rural households as well as increased revenues for rural women farmers across the country.

### **NEMA-CHOSSO INVESTING IN LAND AND INFRASTRUCTURE DEVELOPMENT FOR HIGHER YIELDS AND INCREASED INCOMES OF RURAL WOMEN IN THE GAMBIA.**

Land and infrastructure development has been central component of the Nema-Chosso intervention strategy in The Gambia. A key element of the project's theory of change is that improving the productivity of scarce agricultural land will contribute directly to 'increased incomes from improved productivity based on sustainable land and water management practices' and 'reduced poverty of rural women and youths across the country.

Over the past 5 years, the Nema-Chosso project has made significant investments in land and infrastructure development. The interventions seek to significantly increase the annual incomes of women and youths engaged in production and other activities in value chains linked to rain-fed lowland and irrigated tidal rice and vegetable farming. Key actions to increase yields and incomes of women and youths engaged in farming rain-fed lowland and tidal areas have included investments in land development, reclamation of degraded areas as well as effective water control and drainage structures.



Momodou L Gassama,

The Nema-Chosso Project Director stresses the importance of the interventions and their targeted outcomes: Whilst the project has made major investments in these areas, it is extremely important to stay focused on the targeted results of increased yields and incomes for women and youths. The real achievements should be measured not just in terms of the area developed or improved, but by the impact on the lives and livelihoods of the women and youths who are the direct targets of the project.



Alagie Baboucarr Jabang

A similar sentiment is echoed by the Nema-Chosso Financial Controller, reiterating that Nema-Chosso has invested millions of Dalasi in land and infrastructure development over the past 6 years. The development value of the investments should be measured by improvements in yields and incomes for rural women and youth in the intervention areas.



Kebba Manka

With the achievement of these results in mind, the project targeted 10 communities in the Central River Region (North and South), where 422 hectares of tidal land has been opened for rice cultivation over the past 6 years. In Barajally Suba for example, 40 hectares of previously unused land was developed for tidal rice cultivation in 2017. What is key here, notes the project's land development specialist, is that this represents new farmland made available to women rice farmers in the community. These areas were not being used for any farming activities prior to this intervention. The development of this area represents immediate opportunities for increasing overall

rice production and additional incomes for the farmers.

The importance of this investment and its immediate results are not lost on the minds of women farmers in Barajally Suba. Koteh, a resident rice farmer in the community, recounts her experience in agriculture and how the development of 40 hectares of new tidal area for rice production is impacting her life as well as the lives of women spread across 50 households in her village.



Manjang of Barajally Suba

Similar experiences are shared by men farmers like Yoro Manjang who now works side by side with female household members in the rice fields: "Nema-Chosso also supported us to access tractor ploughing services for land preparation as well as fertilizer. This is a life changing experience for us, and we are more than determined to continue making effective use of this area. We will continue taking slow but sure steps to further increase our yields and revenues from the use of the new area".



Koteh Barajally Suba

I have spent my entire productive life in farming, so agriculture is without doubt my principal source of livelihood. Prior to this investment, myself and basically all women farmers in our community grew rice in unproductive uplands with very low yields of less than 1 ton per hectare. During this period, we produced exclusively for household consumption, and selling rice was not an option for us. With the new tidal scheme developed with Nema-Chosso support, my household now has access to half a hectare of improved tidal area for rice production. We started using this area in 2018, and obtained paddy yields of more than 3.5 tons per hectare in the first year alone!



Paul Mendy

The assistant project monitoring and evaluation officer notes the importance of these achievements for the project and community: With results like this, he stresses, we will continue to stay on track for delivering on key project outcomes.

Lowland and infrastructure development by Nema-Chosso has not been limited to tidal irrigation. Over the past 6 years, the project has also opened up more than 12,000 hectares of rainfed lowland area for use by women farmers spread across 38 communities in 4 administrative regions.





Key investment areas include the construction of causeways, spillways, dikes, bridges for improved water control as well as access to farmland for lowland rice production.

With these investments the project has achieved its minimum productivity target of 3.5t / hectares for lowland rice for Pakalinding and Barajally Suba in just one season of production. At Pakalinding in the Lower River Region for example, the construction of causeways has opened up 350 hectares of lowland that was extremely difficult to access before the project intervention. This represents a fulfillment of the dreams of women rice farmers of Pakalinding that facilitating easier access to their lowland rice fields will bring 'Nemo-dorong' (meaning prosperity) to the community, which represents the source of the project's name 'Nema'!!



### Bakoto Sanyang

Bakoto Sanyang, fondly referred to 'Nema Baama or Mother of Nema', joyfully notes that 'lowland rice farmers at Pakalinding are currently obtaining average paddy yields of almost 4 tons per hectare, a dramatic change from the days when the 'best' farmers obtained maximum yields of less than 2 tons per hectare.

### Challenges and Lessons

- Land development is capital intensive and seasonal which directly impacts on the timely delivery of contracts. The private sector lacks the requisite capacity (personnel and equipment) to delivery works in a timely manner.
- Limited climate information service to improve the cropping calendar, which includes planning for land development civil works.

### Perspectives

- Strengthen national climate information services for timely uptake and use by farmers
- Strengthen national capacity in land and irrigation development and management.
- Update the land use planning maps for improved delineation and identification of productive land for rice production

**OFFERING TRACTOR PLOUGHING SERVICES  
REDUCES THE DRUDGERY OF LABOR AND ENHANCES  
LOWLAND RICE PRODUCTION IN THE GAMBIA**



## BACKGROUND / CONTEXT

Labor intensive land preparation is a major bottleneck for farmers across rice ecologies in The Gambia. This is especially so for women farmers who are the principal rice producers in the country. They are often engaged in backbreaking manual land preparation in rice fields, with significant consequences on their health (especially in flooded fields), as well as their wellbeing and the wellbeing of young children, who often have to be in rice fields with their mothers. In addition, the excessive amount of time taken to prepare small plots of rice fields has consequences on the timeliness of other key production activities (seeding, fertilizer application, water management, etc.) and the resulting rice yields.

Limited access to tractors and other land preparation equipment is a major constraint across the entire agricultural sector in The Gambia. The size of individual and household land-holdings make it highly inefficient for small farmers to make investments in relatively expensive land preparation equipment. Often, producers rely on rented tractor ploughing services, which are expensive and inadequate in supply, resulting in late cultivation. Thus, the high demand and relatively limited supply of these services remain a key challenge for most rural farmers.

Facilitating timely access to land preparation services will contribute significantly to reducing the drudgery of farm labor faced by rural women, as well as increase productivity and production through timely operations and effective management. It will also have direct positive effects on women and young children who would otherwise spend significant amounts of time in rice fields that are often located miles away from villages.



## FACILITATION OF ACCESS TO TRACTOR PLOUGHING CONTRIBUTED TO TIMELY FARMING ACTIVITIES AND REDUCED THE DRUDGERY OF LABOR FOR WOMEN IN LOWLAND RICE FIELDS.

In 2016, 1060 hectares of lowland rice area was targeted for support. Due to shortage of tractors in the targeted areas however, support was provided to cover 990 hectares spread across the 6 beneficiary communities of Giboro Kuta in WCR, Jurunku and Salikene in NBR, Boiram and Kudang in CRRS as well as Taibatou in URR. To cover the shortfall, another 70 hectares of upland area was covered in Giboro Kuta and Jurunku. In total, more than 2000 households benefited from this initiative in 2016.

In light of the challenge of sourcing enough equipment for land preparation, focus shifted to contracting Nema matching grant beneficiaries who successfully procured land preparation equipment through the project's capital investment stimulation fund (CISF). The significant increase in the number of tractors available in 2017 offered an opportunity to extend the land preparation support to a larger number of beneficiary communities. A total of 15 new communities were covered in 2017, directly benefiting more than 4000 households and cultivating more than 2000 hectares of lowland rice. In 2018, the number of beneficiary communities doubled to more than 30, covering a total area of 2700 hectares and 5400 beneficiary households across the country.



Mr. Ensa Colley

The project planning, monitoring and evaluation officer, Mr. Ensa Colley, reflected on the importance of this initiative for rural women in The Gambia:

Addressing the problems of manual land preparation in lowland rice fields is a priority for the project. From a gender perspective, the initiative explicitly targets women farmers who cultivate more than 95% of the total lowland rice area in the country. Supporting these women to increase their production area whilst reducing the drudgery of labour associated with manual land preparation is the primary target of the Nema-Chosso project.



## SALIKENI COMMUNITY RECLAIMS RICE FIELDS THANKS TO NEMA-CHOSSO SUPPORT

Salikeni has a long history of lowland rice production in The Gambia. Multiple generations of women in this community have been engaged in lowland rice over several decades. Like most Gambian rice farmers working in lowlands, production is characterized by labor intensive manual land preparation which limits the total area that women are able to cultivate and affects the timeliness of activities and consequent productivity of the lowlands. Salikeni represents a community where increased salinity associated with inadequate land preparation and poor management forced women to abandon large lowland farming areas. With support from Nema over the past years, the community has now reclaimed abandoned land and is seeing a significant increase in productivity and overall production.



Salikeni lowland rice field



Mariama Trawally

The story is highlighted by Mariama Trawally, who has a 3-decade history of lowland rice cultivation in Salikeni:

Lowland rice production is the principal source of livelihood for myself and practically all women in Salikeni. We rely exclusively on our lowland paddy production to meet our household rice consumption needs. Over the past decade however, we have been forced to abandon more than half of our total lowland area due to salt intrusion and chronic labor shortage for key activities such as land preparation.

Access to land preparation equipment through the Nema tractor plowing support during the last three years is however reversing this trend. Because of timely and proper land preparation, areas abandoned due to salt intrusion are being progressively reclaimed and cultivated. Personally, I have been able to double lowland rice area between 2016 and 2018. Moreover, timely operations have allowed me to increase my yields from less than 2 tons/ha in 2015 to about 3.5 tons/ha in 2018. I expect this trend to continue in 2019. Thanks to the Nema-Chosso initiative, our livelihood sources are progressively being reclaimed.



## Challenges and Lessons

The key challenge in the implementation of this initiative relates to the very high demand from farmers in the face of extreme shortage of agricultural equipment in farming communities. Key lessons from three years of implementation include the following:

- Providing ploughing services at newly developed areas is an effective strategy to put the areas into production.
- Providing 'free' tractor ploughing services to large numbers of communities and beneficiaries may not be sustainable in the long term. Whilst this intervention may offer an immediate 'stop-gap' response, it is important to progressively shift the focus to a more sustainable approach that will seek to link supply to demand at the local level.
- Linking CISF tractor owners to farmers offers a win-win for all. Tractor owners have the necessary clientele to render their operations profitable and sustainable. Farmers benefit directly from reduction in the drudgery of manual land preparation and reap the rewards of higher crop yields and increased production from timely field operations and good crop management.
- Tractor ploughing creates employment opportunity for skilled youth and thus contributes to curbing illegal migration among rural youth.

## Perspectives

- Linking matching grant beneficiaries to farmers that need these services represents a good start. It is however important to consider strategies that would engage farmers to consider land preparation as a direct production cost.
- Have a mechanism to monitor the performance of matching grant tractor owners and provide support to strengthen their business management skills for profitable operation and sustainability  
There is need to promote youth involvement in rice production, so as to boost the limited supply of work force.

**PROMOTING ACCESS TO FERTILIZER AND IMPROVED  
SEED ENHANCES RICE PRODUCTIVITY AND INCREASES  
INCOMES OF RICE FARMERS IN THE GAMBIA**



## BACKGROUND / CONTEXT

Rice cultivation in The Gambia is characterized by low yields, consequently resulting in low revenues for farmers engaged in the rice value chain. The average rice yields across key ecologies are under 1 ton per hectare in upland and rainfed lowland ecologies, increasing slightly in tidal ecologies across the country. Thus, Gambia continues to rely heavily on importation to meet its national rice consumption needs, with rice imports accounting for at least 70% of total consumption.

Key factors contributing to this poor performance include low land productivity and widespread use of poor quality and low-yielding rice varieties. Over the past decade, efforts have been made to address these issues through the adaptation of improved varieties across the key rice ecologies. This includes the introduction of improved NERICA and ARICA rice varieties in partnership with AfricaRice: the key international rice research and development institution in the region. A major issue, however, relates to accessibility as well as large-scale adoption of these varieties. Although the varieties are considered suitable and adapted to various rice growing environments across the country, actual performance of most varieties have been consistently lower than the potentials. This is due in part to conditions such as the very low inherent fertility of Gambia soils.

A holistic approach to addressing these issues will contribute significantly to improving rice productivity and increasing overall production. This will consequently result in increased incomes for rice farmers as well reduction in rice importation.

### NEMA-CHOSSO ENHANCING RICE PRODUCTIVITY AND PRODUCTION THROUGH INCREASED ACCESS TO FERTILIZERS AND QUALITY RICE SEED

Since 2017, the IFAD-funded Nema-Chosso has been supporting increased access to fertilizer and rice seeds as a means of enabling rice farmers to increase their productivity, production and revenues. Targeting selected rice farmer organizations at the village level, a three-pronged approach consisting of facilitating linkages to major fertilizer suppliers, providing guarantees as well as an up-front 50% subsidy resulted in enhancing immediate access to fertilizers for rice production. In addition to this, the project invested in the multiplication and distribution of quality seed of farmer-selected improved rice varieties. In partnership with the national seed secretariat and the Directorate of Agriculture, quality seed of improved varieties were made available to producers across the country.





Nema-Chosso effectively facilitated tripartite negotiations between the Gambia Groundnut Council (fertilizer source), farmer organization representatives and the project for bulk supply of fertilizer for rice production. The arrangement was that Nema would provide a 50% subsidy at the wholesale price as well as a guarantee to GGC for a loan of the balance 50% to the farmer organizations. The groups would in-turn make the fertilizer available to their members at agreed retail market prices. Benefits accrued by the groups would support their operationalization as well as their capacities to progressively take over the initiative.



**Bakary Jammeh**

With this initiative, ready access to fertilizer will enable rice farmers to enhance productivity and increase production. The producer cooperatives have together generated more than D10 Million in two years, proving that the initiative is profitable. Ensuring sustainability requires that farmer organizations are in a position to progressively take over the initiative and continue facilitating access to fertilizers and seed for their members.

## ACHIEVEMENTS AND EFFECTS

Since the inception of this initiative in 2017, twenty-six rice producer groups across more than 25 villages have been supported to facilitate access to fertilizer and quality seed of improved rice varieties for their members. The groups have been clustered into 6 farmer cooperatives to facilitate coordination and enhance their collective bargaining power. The 6 clusters are organized around communities in Boiram, and Kudang in the Central River Region/South, Salikenne and Jurunku in the North Bank Region, Pakalinding in the Lower River Region and Barajally Suba in the Central River Region/North. The 6 cooperatives have a collective membership of more than 12,000 men and women.

The initiative ensured access to fertilizer for rice production for the more than 12,000 households. In 2017, 220 and 230 tons of NPK and Urea respectively were provided to farmers across the 6 cooperatives. Producer members of the cooperatives also had access to tons of quality seed of selected rice varieties (Sahel134, IR19746, IET3137 and WAB 105).

The combined effect of these two initiatives was a significant increase in yields as well as the total area under rice cultivation in the targeted intervention areas. The outreach, yield and production effects of the fertilizer and quality seed initiatives are shared by cooperative members of Boiram and Jurunku respectively



**Jija Drammeh of Jurunku:  
Surplus rice and increased income have  
made me a proud mother!**

Rice production in the Jurunku cluster is largely subsistence, and women struggle to produce enough to meet their household needs due to limited access to key inputs like fertilizer. With support from the project, our cooperative procured 600 and 1300 bags of fertilizer in 2017 and 2018 respectively. This was made available to our members at ongoing market retail prices. In addition to this, the project provided us with 30 bags of quality seed of improved rice varieties selected by the beneficiaries. The effects of these initiative have been dramatic for small scale rice farmers like me in the village. With access to fertilizer and improved seed, our yields have increased from 1.5 to more than 4 tons per hectare. For the first time ever, my total production has exceeded my household rice consumption needs. I now have the unexpected opportunity to sell surplus rice for much needed household income with which I can support my family. I am now able to contribute to the schooling and clothing of my children, making me a proud mother!

### Lessons

- Collective group action by farmers in comparison to low individual purchasing and bargaining powers is an effective way of facilitating access to improved inputs for small scale-farmers.
- Leveraging project resources for loan guarantees as well as part-financing with a clear strategy for ownership and sustainability are key drivers of the success of this initiative
- Group capacity development support is essential for effective organizational management and the ability of the cooperatives to respond to the needs of their members and take appropriate measures to meet their contractual obligations with the GGC.

### Perspectives

- Continued capacity development support to cooperatives for effective management of resources and a business approach to agriculture
- Linking cooperatives to other actors of the rice value chain across key project sites
- Supporting the development of sustainable agricultural financing strategy in partnership with the National Cooperative Credit Union of the Gambia (NACCUG).
- Support rice producers with integrated input management techniques; i.e. fertilizer and seed application techniques.



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