

Action Plan for Promotion of Rice Production in Sudan
Alignments to National Economic Reform Programme 2015-2019, CAADP and NRDS

Vision

Produce rice to meet domestic demand and export to contribute to food security and poverty alleviation.

Mission

To contribute to the development of a sustainable agricultural sector through establishment of a competitive and sustainable rice production and marketing system.

Goals

The aim is to increase 8-10 times the current rice production at least in Sudan by the year 2018.

Objectives:

- To increase rice productivity per unit depending on ecosystem through intervention in input delivery and empowerment of rice stakeholders through capacity building on rice cultivation technique;
- To support private investors in rice production in up-land and low-land irrigated ecosystems and establishment of rice processing facilities;
- To provide suitable irrigation facilities through the rehabilitation of irrigated schemes;
- To improve production, multiplication and dissemination of purified rice seed;
- To enhance mechanization of the rice cultivation and harvest;
- To minimize post-harvest losses through improved post-harvest handling and processing technologies; and
- To improve research, technology dissemination and capacity building on rice cultivation

Target Area in Rice Development Plan 2014-2018

		2014	2015	2016	2017	2018
Upland Rice Irrigated	feddan	30,000	45,000	65,000	100,000	135,000
	ha	12,600	18,900	27,300	42,000	56,700
Lowland Rice Irrigated	feddan	12,000	15,000	20,000	25,000	30,000
	ha	5,040	6,300	8,200	10,500	12,600
Rice Swampy	feddan	20,000	20,000	20,000	20,000	20,000
	ha	8,403	8,403	8,403	8,403	8,403
Total	feddan	62,000	80,000	105,000	145,000	185,000
	ha	26,040	33,600	44,100	60,900	77,700

Estimated Productivity of the rice ecosystems (tons) 2014-2018

Ecosystem	2018 estimated yield
Aerobic Target Variety: <u>Nerica 4 and four released varieties by ARC</u>	4 tons/ha (refer to the result of ARC's test result and demonstration farm)
Submerged Target Variety: <u>Basmati and others</u>	4 ton/ha (if properly managed by investors)
Swamp Target Variety: <u>Local varieties, ARC hybrids expected</u>	3 ton/ha (increase due to ARC and the state government effort)

Estimated Production of the rice ecosystems (tons) 2014-2018

Year	2014	2015	2016	2017	2018
Upland rice, irrigated	35,650	56,700	95,550	147,000	226,800
Low land rice, irrigated	13,860	18,900	28,700	36,750	50,400
Swampy rice	23,108	23,108	25,210	25,210	25,210
Total production	71,618	98,708	149,460	208,960	302,410

Activates and outputs of Action Plan for Promotion of Rice Production in Sudan

Actions Points Specific Activities	Responsible Person	Budget		Timeframe	Measurable Indicator
		US\$ '000'	Source		
Communication, Documentation and Knowledge Management/ Sharing					
Technology Generation (included Research & Post Harvest): <ul style="list-style-type: none"> - To develop superior and excellences varieties with: <ul style="list-style-type: none"> o High Yield Potential with high water used efficiency. o Short Growth Duration o Superior Grain Quality o Multi-major disease and insect resistance - To strengthen research activity (rice seed and varieties, irrigation for large scale rice production and comparing between upland rice and paddy rice cultivation, fertilization including animal manure, pest and disease management, weed control, machinery, post-harvest technology and storing to maintain seed quality) by ARC and others - To establish clear criteria to release rice variety, data base through collaboration with state governments and formulation of a research action plan with clear time schedule 	MOAI, ARC, JICA and Rice Units at Federal and States	1,200	GOS and Donors	2014-2018	<ul style="list-style-type: none"> - By the end of the 2018, 60% of the staff members of the FMOAI (who received training) and extensionists in six States MoA demonstrate improvements in action planning, implementation, monitoring & evaluation relating to the Action Plan of Comprehensive National Agricultural Development Programme. - By the end of the 2018, 80% of the staff (who received training) and extensionists in 6 States MoA show improvement in the score of the self-capacity evaluation
Collaboration with International Agency & Next Forums <ul style="list-style-type: none"> - To collaborate with Arab organizations - To equip a capacity to be a new partner with international agencies - To utilize two years extension of ongoing JICA project to solve the rest of the bottleneck issues - To continue "Rice Sector Development Forum" 	CARD, AOAD, AAAID, MOAI, FAO, Rice Unit, ICID, JICA, and other potential donors	700	GOS and Donors	2014-2018	<ul style="list-style-type: none"> - More than 80% of training participants are qualified as trainers on appropriate rice cultivation technique
Training: <ul style="list-style-type: none"> - To provide ToT training to extensionists and farmers - To formulate a programme of vocational training including machinery operation - To train extension workers and farmers on appropriate rice cultivation techniques 	JICA, MOAI, National institutions	3200	GOS and Donors	2014-2018	<ul style="list-style-type: none"> - More than 60% of farmers who grew upland rice in demonstration farms show a willingness to grow rice again. - A practical/technical

Demonstration farms: - To promote upland rice cultivation to farmers' field	TTED, ARC, JICA	1500	GOS and Donors	2014-2018	handbook on upland rice cultivation is prepared
Piloting Platforms Farms: - To develop appropriate upland rice cultivation techniques	TTED, ARC	6,000	GOS and Donors	2014-2018	
Rice Centres of Excellency: - To establish Centres of Excellency specialized in rice production promotion.	JICA, GOS, other Donors	12,600	GOS and Donors	2014-2018	
Extension, Agricultural Organization and Awareness Building: - To build "a board" which is specialized in rice production authorized by law to have power and access to credit. The board provides extension service to farmers and have responsibility of marketing of rice.) - To adopt commodity specialized approach (Extensionists would concentrate on one commodity.) - To establish "village rice group/ villages council/ Rice producer union" and cooperatives in each village according to producers law 2011. - To further strengthen extension service and utilize media for awareness building to farmers.	TTED, Media, websites and social media	4,000	GOS and Donors	2014-2018	
Institutional Arrangements for Service Providers					
Agricultural Input, Agricultural Finance and Microfinance: - To provide service by private sectors (CTC, ABS, FTB, ARB, SSDB, etc.) to farmers in term of, labour, land preparations, herbicides and fertilizers		4,000	GOS and Donors	2014-2018	Degree of Involvement of private sectors in service providers and rice production business
Seed Production: - To improve upland rice seed production techniques - To provide professional processing facility for seed multiplication to maintain the quality and quantity of the seed production (for example, cleaning, drying, storage and packaging) - To collaborate with AAAID, which cooperates with other seed companies, for the multiplication of the approved pure line seeds varieties under the supervision of TTED, Seed Department, ARC and JICA experts - To produce new suitable varieties for different regions in Sudan		8,000	GOS and Donors	2014-2018	Quantity, quality and coverage of rice seed production is improved.

<p>Machinery (included Post Harvest):</p> <ul style="list-style-type: none"> - To import proper machines and manufacture a prototype machine locally from land preparation, seeding, spraying, fertilizers distributors, harvesting and post-harvest technologies - To provide suitable Rice Combine Harvester to minimize combine losses and maintain good quality. - To provide suitable Rice dryers and milling to maintain good quality 	GOS, JICA, Private sectors potential donors, ABS	10,000	GOS and Donors	2014-2018	Number of machines and level of machinations
<p>Market:</p> <ul style="list-style-type: none"> - To research and/or study on rice value chain, profitability, and marketing - To revitalize /or stablish a “National Commodity Council” for the organization of production and trading of rice to overcome the deficit and for exportation purposes 		1,000	GOS and Donors	2014-2018	Research and studies conducted Meeting and results in the value chain
Harmonization					
<p>CAADP, CARD, NRDS, Presidential imitative for regional food security (Arab and Africa) & Rice Sector Development Forum:</p> <ul style="list-style-type: none"> - To enhance planning, implementation, monitoring and evaluation for promotion of rice production in Sudan - Revise and implementation of Rice Sector Strategy (NRDS) - Capacity development of actors in rice development - Increase investment through creation of enabling environment - Coordination and Alignment 		500	GOS and Donors	2014-2018	➤ A structure to implement and review (monitoring and evaluating progress and reflecting evaluation results to the next plan) the NRDS is recommended.
Resource Mobilization					
<p>Policy, Organization, Budget/Finance</p> <ul style="list-style-type: none"> - To activate policies that support and implement rice sector development in federal and state levels for the producers as in the case of sorghum and wheat crops - To provide finance through the banking systems - Approaching potential donors through different global, regional, bilateral initiatives - Promote and mobilize public private producers partnerships (PPPP) - To develop bankable production modalities - To encourage individual and community saving capabilities 		500	GOS and Donors	2014-2018	➤ Knowledge management: <ul style="list-style-type: none"> ○ develop a common pool of up-to-date information on key indicators to support policy formulation, analysis, and dialogue ○ document and share lessons to guide growth and poverty reduction strategies ○ share knowledge with stakeholders in a variety of forms: policy briefs, conferences, websites

Implementation, Coordination, Monitoring and Evaluation					
<p>Coordination and Implementation:</p> <ul style="list-style-type: none"> - Coordination among farmers, researchers, extension and other stakeholders - To finance research activity and National Rice Programme - To establish suitable subsidy systems for rice producers under National Rice Programme. 	MOFNE, GOS, JICA, TTED, Private sectors potential donors, ABS, ARC and Universities	4,000	GOS and Donors	2014-2018	➤ A structure to implement and review (monitoring and evaluating progress and reflecting evaluation results to the next plan) of the NRDS is established and functioned.
<p>Issues for Sustainability:</p> <ul style="list-style-type: none"> - Internalization of “Model System” in Federal MoAI and States Ministries - Coordination between Federal MoAI (NRP) & State MoAs - Implementation of NRDS follow up - Capacity strengthening and policy communication: <ul style="list-style-type: none"> ○ collaborate and work closely with regional and national networks of partners ○ Provide training and analytical tool to national partners to improve own capacity in analysis and planning - Establish national platform to improve policy analysis, review and dialogue to improve implementation of national agriculture investment plans 		800	GOS and Donors	2014-2018	➤ Strategic analysis: <ul style="list-style-type: none"> ○ monitoring key CAADP targets: 6% annual agriculture growth and 10% budget allocation to agriculture; as well as other national development targets ○ impact assessment of agricultural sector interventions on key development outcomes
<p>Monitoring & Evaluation, follow up:</p> <ul style="list-style-type: none"> - Develop Monitoring & Evaluation systems - Rice Sector Development Forum and coordination meetings - Reporting and documentation 		2000	GOS and Donors	2014-2018	➤ Quarterly and Annual report on action plans for rice development (analysis, planning, monitoring & evaluation, technical development, seed production, and extension) are formulated.

Total budget US\$ 60,000,000 and the government contribution is 30% out of the total