

Expert Group Meeting on Promoting Best Practices  
On sustainable Rural Livelihoods in the ESCWA Region  
Beirut, 24-25 November 2010

## **SPECIAL PROGRAM FOR FOOD SECURITY IN SUDAN**

*by*

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# Expert Group Meeting on “Promoting Best Practices on Sustainable Rural Livelihood in the ESCWA Region”

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## Special Program for Food Security

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**Sudan**

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## General Indicators

- According to National Accounts, GDP growth averaged 3.8 % in the period 1990-1995 ,then accelerate in the second half of the nineties (6.2%).
- Sudan is a least developed country with very poor socio-economic indicators: life expectancy at birth is 56 years; adult illiteracy stands at 42% and 17% of the children under 5 are underweight.

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## Agricultural indicators

- The agricultural sector contributes by approx. 45% of the GDP
- 70% of the total population depend on agriculture as a source of living
- 90% of non – petroleum export earnings come from agriculture.
- Potential cultivated area 200 million feddans
- Total area planted amount to 42 million fed

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## Food Security Policies in Sudan

- Agric development to improve the agric performance
- Applying technical packages to improve the productivity and production.
- Promoting coordination among stakeholders on FS initiatives and fostering private sector.
- Promoting a strategic diversification of food security interventions by linking food security analysis and responses.
- Capacity building of national stakeholders, particularly at decentralised and community level.

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## Food Security Policies in Sudan

- Improving food availability and access.
- Promoting assets creation by and for the rural poor.
- Defining and prioritising key social protection measures for vulnerable groups.
- Identifying and supporting key rural services.
- Promoting sustainable natural resource management to support livelihoods and reduce risks of conflict over resources.

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## Special Program for Food Security

- The World Food Summit endorsed the Special Program for food security (SPFS) initiated by FAO to address problems of food insecurity in Food Deficit Low Income Countries. Sudan is one of the countries that requested and received assistance from FAO under the SPFS

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- The philosophy rationale and objectives of SPFS is consistent with Sudan's agricultural development strategy, food security action plan and related programs.

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For piloting purposes of the SPFS the following criteria was adopted:

- Good potential for intensification and diversification of the production system.
- Areas representing wide ecological zones and environmental a socio-economic settings.
- Areas with irrigation facilities and infrastructures but lacking efficient irrigation water management.
- Availability of suitable technologies,
- Accessibility,
- Community willingness
- Availability of supporting institutions and human resources needed.
- Areas with access to research stations and extension services.

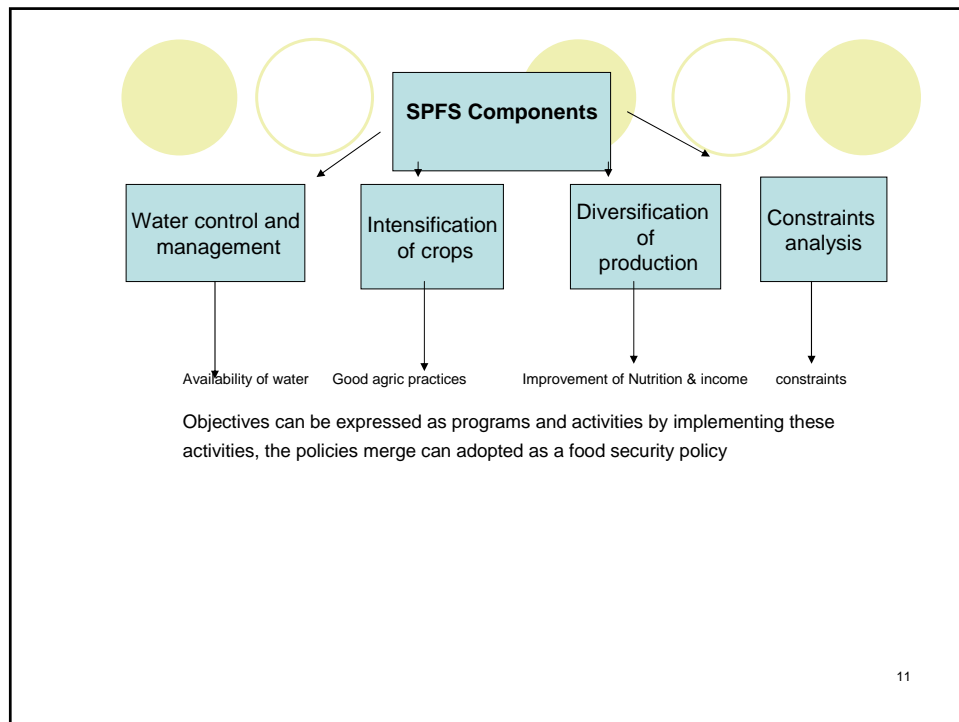
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## Program Components

- Intensification of Crops
- Diversification of Production
- Water Control and Management
- Constraints Analysis

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## The Objectives of the Program:

- To improve and boost livestock and crop production through enhancing and sustaining local technologies and practices that proved successful.
- To eliminate or reduce the large year-to-year variation in livestock and crop production.
- To improve and/or introduce income-generating activities for the low-income groups.
- Identify and analyze the causes of food insecurity and the production constraint.

## The Objectives of the Program:

- Identify and quantify the issues concerning poverty levels in each site.
- Promoting social equity and conservation of the natural resources base and assessment of accessibility and other poverty issues in the process of interventions, implementation and technology transfer.
- Intervention whenever possible would target the poor and be gender sensitive.
- To ensure the sustainability of any successful intervention, participation of local farmers, community, and institutions is essential.

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## The program approaches:

- Participatory planning.
- Revolving Fund.
- Technical packages.
- Farmer's organizations.
- Cooperatives.
- Gender mainstreaming.

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## Achievement Indicators:

- Increase in productivity in water harvesting and supplementary irrigation, and other irrigation techniques, compared to the traditional farming.
- Participation in fulfillment of food security by increase in production and income to access food not internally produced. Also by rearing of animals nutrition situation is improved.
- Increase in Agric. Returns and livelihood improved.
- Adoption and replication of new techniques in wider spectrum.
- Involvement of women in production cycles.

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## Summary of Results:

- Productivity increased comparable to traditional Agriculture
- Increased revenues from crop production in the program sites compared to the traditional system for example an increase in the average revenue by 301% in water harvesting.
- The average net return of the beneficiaries in the gravity and pumps in Khor Abu habil, increased

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## Summary of Results:

- Increase in average net return of the beneficiaries in the gravity supplementary irrigation compared by the traditional farmers.
- Increase of the beneficiaries with pumping sets compared by the traditional farmers.
- increase of HH with flood irrigation compared with traditional

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## Summary of Results:

- Number of farmers' field schools is 59% of them were men and 49% are women.
- Training program included the training of trainers and training of farmers
- Consumption rates of main crops exceeded the standard rate in all program sites
- Nutrition improved in terms of Availability of food and diversification of production.
- The implementation of the revolving fund increases the number of beneficiaries.
- The farmers organizations enhance the process of technologies application and facilitate the availability of services

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## water harvesting techniques with Chiseling- North Kordofan:



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## Nursery in Lower Atbara Site



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## Rehabilitation of Deserted land Component

- This component aims to provide a comprehensive support to elevate the problem of wind erosion, desertification and drought
- Two nurseries in Lower Atbara Site, 40000 trees have been planted to support the Agro cover and prevent the spread of desert creeping.

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- ❖ In West Omdurman green fodders were planted in the farms with other crops to supplement animal feeding added to natural forages .
  - In Northern Kordofan 1000 fd. were transplanted by improved seeds
  - In Lower Atbara green fodders were planted in the farms with other crops to supplement animal feeding added to natural forages.

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## Area Cultivated by Millet in North Kordofan



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## Development of cultivated areas

Season	Sites					
	North Kordofan	%of increase	Lower Atbara	%of increase	West Omdurman	%of increase
2004/2005	6944	0	60	0	0	0
2005/2006	14065	102.5	283	372	35	-
2006/2007	37500	166.6	525	85	60	71.4
2007/2008	22336	-40*	441.5	-16**	270	350

\*decrease due to high rains, only gardud was cultivated

\*\* decrease due to high floods

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## Productivity of Sorghum and Wheat in Lower Atbara and Sorghum in North Kordofan 2006/2007:

Crops	Sites	Average Productivity/ sack		%of increase
		Program Sites	Traditional	
Sorghum	North Kordofan			
	Gardud	6	2.3	160.8
	Rahad and ELsemeih	8.9	4.5	97.8
	Lower Atbara	12	3	300
Wheat	Lower Atbara	17	10	70

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## Restocking with Sheep



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## Findings in Northern Kordofan

- Revolving the second batch to new HH.
- Greater impact in nutrition improvement for the HH.
- Improve incomes and advantage of mixed farming.
- The number increased by 49%, to benefit extra HH by revolving mechanism

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## Findings in Lower Atbara

- The number of household increased from 65 HH to 156 as a revolving mechanism.
- The percentage increase in number is 138% in the herds, compared with the received batch .
- Improvement of nutrition and income.

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## Findings in **West Omdurman**

- The batch was distributed to the women to involve them in the production cycle.
- The mortality rate is high as a result of bad feeding of animals.
- New HH received small ruminants.
- The number increased by 4.6%.

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## **Gender mainstreaming**

- One of the objectives of the program is the gender equity and mainstreaming
- .In order to organize the beneficiaries through establishment of associations and organizations including men and women. The women participated in all organizations and cooperatives.

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## Gender mainstreaming

Site	Activities	% of women	% of men	Remarks
North Kordofan	Intensification of crops	40	60	
	Sheep Restocking	100	0	assisted byThe village committees
	Goats Restocking	100	0	implemented in 2006
	Sheep Fattening	**	**	Distributed to 7 cooperatives
	Other Activities	50	50	Training and community animation
Lower Atbara	Intensification of crops	0	100	Due to traditions in the area
	Sheep Restocking	**	**	Distributed to 2 cooperatives
	Goats Restocking	100	0	Would be implemented in 2006
	Sheep Fattening	-	100	Due to the far distance of the rangeland
	Other Activities	100	0	2 nurseries implemented by the women
West Omdurman		25	75	Training and Community animation
	crops Intensification	20	80	
	Sheep Restocking	100	0	This activity targets the women to improve their income and nutrition
	Goats Restocking	100	0	
	Sheep Fattening	-	-	This activity was not implemented According to beneficiaries willing.
	Other Activities	30	70	Training and Community animation

\*\* including men and women

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- Increase the awareness of the students on the environmental issues especially ecological agriculture "tree plantation, reforestation" etc...

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**The impact of the program can be summarized as follows :**

- ✓ **Application of agricultural technologies.**
- ✓ **Increasing production and productivity in program areas.**
- ✓ **Increase income due to the remarkable increase in production.**
- ✓ **Create income-generating activities to increase the income**
- ✓ **Contribution in overcoming the consequences of soaring food prices.**
- ✓ **food security achieved and nutrition improved.**

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## **Overall Constraints: -**

The most vital constraints facing the project, that affected the implementation of the project were:

- \* Limitations of fund compared with activities leads to exclude some activities to be implemented.
- \* The priorities of the beneficiaries and the knowledge of the people in the Sites by their needs, made the management accept their choices and this took a long time.
- \* Some damages in irrigation systems added to high floods and rains minimized the area in the last season

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