

REPUBLIC OF KENYA



MINISTRY OF AGRICULTURE

NYANDARUA NORTH DISTRICT

Presentation During The Workshop On

**MAKING AGRI-FOOD SYSTEM WORK FOR THE
RURAL POOR**

at St Martins Catholic Hall

Presented by

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District Agricultural Officer

NYANDARUA NORTH

9th March 2011

Our mandate

To promote and facilitate production of food and agricultural raw materials for food security and incomes; advance agro-based industries and agricultural exports; and enhance sustainable use of land resources as a basis for agricultural enterprises.

Our vision

To be the leading agent towards the achievement of food security for all, employment creation, income generation and poverty reduction in Kenya.

Our mission

To improve the livelihood of Kenyans by promotion of competitive agriculture through creation of an enabling environment, provision of support services and ensuring sustainable natural resources management.

Core values

Our activities are guided by;

- Professionalism
- Accountability, transparency and integrity
- Commitment
- Efficiency and responsiveness
- Partnerships
- Gender equity

NYANDARUA NORTH DISTRICT BRIEF

Background information

NO	DESCRIPTION	LEVEL
1	Area	683.6 Km ²
3	Population(2009)	92,626
4	Divisions	2
5	Locations	8
6	Sub-locations	19
7	Farm families	19,138
8	No. of Technical staff	20
9	Staff farmer ratio	1:957
10	Average farm size	3 acres
11	Altitude	2100-3000 A.S.L
12	Annual rain fall	700-1500 mm p.a
13	Rainfall pattern	Bimodal
14	Long rains	March-May
15	Short rains	Oct-Dec
16	Temperature range	2 - 25 O ^c

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AEZ

	UH ₀ -Forest Zone	2740-3000 M(ASL)
	UH ₁ –Sheep, dairy & Forest zone (Potatoes, garden peas, cabbages, kales)	2400-3000m (ASL)
	UH ₂ - Pyrethrum& wheat zone(Potatoes, garden peas, cabbages, pyrethrum, dairy Zone)	2400-3000m (ASL)
	UH ₃ -Wheat and barley zone(Potatoes, garden peas, cabbages, pyrethrum, dairy animals Zone)	2370-2430 M(ASL)
	UH ₄ –Ranching Zone(wheat dairy ,poultry)	2280-2370 M(ASL)
	LH ₂ -Barley zone (Maize, pyrethrum, potatoes)	2250-2280 M(ASL)
	LH ₃ -Wheat, Maize and Barley zone (maize, beans, pyrethrum)	2250-2280 M(ASL)
	LH ₄ Cattle Sheep& barley zone (Maize , wheat, pyrethrum)	2190-2280 M(ASL)
	LH ₅ -Ranching zone(sheep, goats, beef animals)	2070-2190 M(ASL)

MAIN ENTERPRISES: 2010/2011 ACHIEVED CROP ACREAGE SUMMARY

Crop	Targets						Achievements					
	Area in Ha			Production in Bags			Area in Ha			Production in Bags		
	LR 2010	SR 2010	Total LR+SR	LR 2010	SL 2010	Total LR+SR	LR 2010	SR 2010	Total LR+SR	LR 2010	SR 2010	Total LR+SR
<u>Cereals</u>												
1.Maize	4,100	1,250	5,350	147,600	37,500	185,100	3,570	545	4,115	230,000	1,090	231,090
2.Wheat	625	155	750	28,125	5,425	33,550	175	0	175	3,500	0	3,500
3.Sorghum	4	3	7	60	45	105	8.5	4.5	13	97.5	9	106.5

MAIN ENTERPRISES: 2010/2011 ACHIEVED CROP ACREAGE SUMMARY

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	Area in Ha			Production in Bags			Area in Ha			Production in Bags		
	LR 2010	SR 2010	Total LR+SR	LR 2010	SL 2010	Total LR+SR	LR 2010	SR 2010	Total LR+S R	LR 2010	SR 2010	Total LR+SR
Legumes												
4.Beans	980	550	1,530	9,800	5,500	15,300	450	114	564	4,500	228	4,728
5.Dolichos	-	-	-	-	--	-	2	3	5	14	3	17
6.Garden peas	310	160	470	3,100	1,600	4,700	275	110	385	1650	440	2,090
Pigeon peas	4	3	7	40	40	80	5	3.3	8.3	20	-	20
Lima bean	2	0.5	2.5	20	2.5	22.5	1.5	0	1.5	4	0	4

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	LR 2010	SR 2010	Total LR+SR	LR 2010	SL 2010	Total LR+SR	LR 2010	SR 2010	Total LR+SR	LR 2010	SR 2010	Total LR+SR
Irish potatoes	1,830	740	2,570	183,000	74,000	257,000	1,475	645	2,020	130,080	3,548	133,628
Tomatoes	15	10	25	80 Tonnes	53 Tonnes	133	15	5	20	78 Tonnes	26 Tonnes	104 Tonnes
Carrots	25	20	45	25 Tonnes	20 Tonnes	45 Tonnes	20	10	30	30 Tonnes	10 Tonnes	40 Tonnes
Sweet potatoes	7.5	7.5	15	15 Tonnes	15 Tonnes	30 Tonnes	11	6	17	120 Tonnes	48 Tonnes	168 Tonnes
Cassava	7.5	7.5	15	12.5 Tonnes	12.5 Tonnes	25Tonnes	5	3.5	8.5	56.25 Tonnes	35 Tonnes	91.25 Tonnes
sunflower	5	5	10	40 bags	40Bags	80 Bags	4	3.5	7.5	37 Bags	37 Bags	74 Bags

Crop	Variety	Quantity received MT/cuttings vines	No .of beneficiaries from original seeds by gender			Area planted (Ha) from original seed	Quantity seeds retrieved MT/cuttings vines	No. of beneficiaries from retrieved seeds by gender	Area planted (Ha) from retrieved seed	Grand total area planted (Ha) F+I	Total estimated food production from the O/crops F & I MT
<i>Irish potatoes</i>	(Expected) 3.0 tons										
Cassava	(Expected) 35,000										
Sweet potatoes	(Expected) 25,000 Assorted										
Total district	Food crops										
	Cassava cuttings										
	S/potatoes										
		5.5 T	430M	970F	1400						

THE DISTRICT'S AGRICULTURAL POTENTIAL AND PERFORMANCE

- Rain fed and Irrigated farming is mainly practised in the district. Horticulture is the predominant agricultural sub-sector in the district and generates the highest percentage of the household's income. Production of **Irish potatoes** and **Tomatoes** is notable in the district. About 45% of horticultural production depends on drip and furrow irrigation.
- Nyandarua North District has great potential for adequate food, cash crops and livestock production.
- Despite various challenges our farmers face, they work hard to boost agricultural production.



AGRICULTURAL PROGRAMMES AND PROJECTS IN THE DISTRICT

Regarding Food Security and Poverty Reduction objectives, the Ministry is implementing a number of programmes in this District, such as:

National Agriculture and Livestock Extension Programme (NALEP SIDA)

Objective: To raise the level of farm productivity through efficient and pluralistic extension service.

It is implemented by the Ministry of Agriculture and Livestock in Collaboration with stakeholders.

Coverage: It covers one location per division per year. This year the project covered 1 locations in larger Nyandarua North District

Achievements:

- 1 broad based surveys done in three divisions
- 23 enterprise based farmer groups (CIGS) formed and trained on the following with a commercial orientation bearing
- Drought tolerant crop production – lima beans, dolichos lablab, sweet potatoes, cassava

National Agriculture and Livestock Extension Programme (NALEP SIDA) cont

- Crop production using green house technology- tomatoes, capsicum, strawberry, corghetes
- Maize and bean production
- Appropriate technology- kitchen gardening, multistory garden, drip irrigation
- Environmental conservation –use of energy saving devices, water harvesting
- Value addition technologies- construction of storage structures, (cribs, diffuse light store) processing, packaging and labelling among others.
- Fodder production
- Local poultry and sheep improvement (breeding)
- Modern beekeeping
- Water harvesting for crop production.

National Agriculture and Livestock Extension Programme (NALEP SIDA) cont.

- Dairy goat and cow production
- Rabbit farming
- 1 Community based monitoring and evaluation institutions formed (FADC)
- 6 professional group meetings held
- 2 stakeholder forum meetings held at the divisional level and.
- CIG Trainings – 175 – total no of farmers trained 3375(1729 M/1646F)
- Field days 2. Attendance 1080 (185M/175F,347 boys/373 girls)

National Agriculture and Livestock Extension Programme (NALEP GOK)

Objective: To raise the level of farm productivity through efficient, effective and pluralistic extension services.

Coverage: district wide.

Achievements

- 40 farms laid with soil conservation structures
- 0.5 retention ditches
- 11.7 km terraces
- 5 water pans constructed
- 3 DAC/Sub DAC meetings held
- 20 agriculture input suppliers trained
- 10,000 farmers reached with extension messages
- 1- survey conducted on crop and food security
- 9.2 km of river bank pegged
- 22 barazas held

Njaa Marufuku (NMK)

- **Objective:** To eradicate hunger and poverty for the rural community
- **Coverage:** district wide
- During the 2009/10FY year, three groups were funded to a tune of Kshs 420,000 grant.
- Shauri youth group green house tomatoes Kshs 120,000
- Githunguchu Witeithie Nguteithie S.H.G. – Kshs 150,000 poultry keeping
- Lower Kariithi Fruit growers SHG rabbit rearing.
- **Achievements**
- 12 farmer groups funded since 2005 to undertaking the following towards poverty eradication:-
- Vegetable production (carrots, cabbage, spinach, kales) using drip irrigation using water harvested
- Environmental conservation through agro-forestry trees and fodder seedling production
- Fish farming
- Poultry farming
- Rabbit production
- Green house tomato production

Small Holder Horticultural Marketing Programme (SHoMaP)

- **Objective:** To raise the quality of horticultural produce traded in domestic market, reduce the unit cost of farm inputs, increasing and stabilizing farm gate prices, employment and wealth creation.

Coverage: Nyandarua North. It also extends up to Nyandarua West, Nyandarua Central and Mirangine districts.

Achievements

- Training agrodealers. 117 stockists trained on business planning and management, customer management, agricultural input product knowledge and networking.
- Value chain analysis of priority crops. Three crops identified are Irish potatoes, Cabbages and garden peas
- Identification of horticultural crops and market improvement. 1 horticultural produce market earmarked for construction

Small Holder Horticultural Marketing Programme (SHoMaP) Cont.

ACHIEVEMENTS

- Ndaragwa fresh produce market in Ndaragwa Division approved for funding: Kshs 26,537,354.80. EIA has been finalized, contract awarded and construction work to start when the contractor moves to the site.
- 1 road in Shamata – Ndarasha Mbili – Kiambogo road appraised awaiting approval
- 1 pilot initiative for Leshau Green house and dairy farmers appraised awaiting approval.
- The following 5 proposals forwarded to SHoMaP awaiting appraisal
 - Dakima SHG – grading shed – garden peas
 - Makape SHG – Potato store
 - Munandaini SHG – Potato store
 - Mafagra SHG – Magutu rutara road and bridge
 - Kirimathi Horticulture SHG – Kanyuira Kingi well road.

Water harvesting (water pan) Construction

- **Objective:** To demonstrate to farmers how to construct water pans, harvest water use it for irrigation.

Coverage: district wide

Achievements

- 6 water pans constructed for farmer groups. The water is used for irrigating vegetable, fruit tree and fodder /agro forestry nurseries

“3G” POTATO PROJECT

- **Project title:** Tackling the food price crisis in Eastern and Central Africa with the humble potato: *Enhanced productivity and uptake through the “3G” revolution, Funded by USAID*
- **Project goal:** To raise the availability of clean quality potato seed from the current level of around 1% of national needs to about 10% of national needs in two years.
- **Project purpose:** To restore seed availability to smallholder farmers and increase the future availability and usage of quality seed in a sustainable seed system
- **Project Partners**
- International Potato Center (CIP), the lead executing agency has identified several implementing partners consisting of research institutions, Ministry of Agriculture, NGOs and CBOs.
- **Achievements**
- 10 Farmer groups are trained on positive seed selection to produce potato seed and be supported in building the diffused light store (DLS) for potato storage.

Extending Agro dealers Network EADN

- It is an IFDC/IFAD funded project. It is collaborating with SHOMAP for its implementation.
- Five groups were trained and also provided with certified seed potato, garden peas & MAP fertilizer to establish a demonstration plot.
- 20 agrostockists trained on safe handling of agricultural production products.

Subsidized fertilizer

Type of fertilizer	SR 2009(bags of 50kg)	LR 2010 (Bags of 50 kg)
DAP	6391	6796
CAN	462	1469.5
NPK	37	1268.5
MAP	16	6352

Comments

The prices have changed to 2,500 for DAP and NPK 17:17:0, 1600 for CAN and Urea.

Agri - food systems

- Project area- Kiriogo location
- Promoting Drought Tolerant crops(DTC) and Oil crops.
- Crops being promoted are; sunflower, Rapeseed, Dolichos, Lima beans, Pumpkins and Pigeon peas

Project achievements.

- 1 stakeholder forum
- 6 Demonstrations
- 5 group trainings on agronomic aspects
- 6 enumerators trained.
- 1 field day(111 farmers; M 72, F 39)

Major Production Challenges Faced By Farmers Are

- High harvest losses due to inaccessible roads during wet weather that incidentally coincides with the peak production period of most horticultural produce.
- Limited value addition due to lack of agro processing facilities in the district.
- High farm input prices and field operation costs vis a vis the market prices.
- Non-payment of pyrethrum dues to farmers. So far Nyandarua North farmers had been owed millions of shillings by Pyrethrum Board of Kenya. As a result the crop has been replaced or abandoned.
- Lack of organised marketing systems and well set legal frame work governing the marketing groups, hence exploitation of farmers by middlemen
- Agricultural commodity prices fluctuating
- High dependency of rain fed agriculture which leads to over supply at times.
- Deteriorating levels of soil fertility and land degradation.
- Diminishing of cultivatable land due to continued land subdivision
- Low adoption of appropriate technologies due to high cost of technologies.
- Unreliable weather condition due to climate change

Proposed Way Forward

- Promotion of value addition and agro processing technologies.
- Formation of enterprise based associations and groups to enable farmers to buy inputs in bulk and market their produce.
- Promotion of water harvesting technologies.
- Stakeholder involvement in extension service provision and promotion of technologies.
- Community empowerment through capacity building trainings in group management and leadership.
- Community resource mobilization for them to adopt technologies in production and agro-processing.
- Promotion of drought tolerant (orphaned) crops .

Thank you -God Bless



END