Organic Vegetables Production: A Case Study of Nkomamonta Cooperative

Linking Farmers to Markets Focus Area

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Presentation Outline

- Introduction
- Project background
- Objectives
- Methodology
- Results
- Success factors
- Challenges
- Recommendations
- Conclusions

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Introduction: Organic Production

- Involves use of renewable resources, conservation of soil and water to enhance environmental quality for future generation. E.g no use of antibiotics or growth hormones for animals, Veg – no use of conventional fertilizers or pesticides

- Organic agriculture is relatively new in SA

- Consumption > Production (Waarts *et al.*, 2009)

- Demand for organic products is high on the local and international market

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Project Background

- Established in 2003 by 18 farmers
- Located in Tzaneen Municipality
- Produces different types of organic vegetables destined for various markets
- Contract with Westfalia - Packing and transport
- Contract with Woolworth – Market

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Why- Co-operative formation?

Major reasons:

- Leverage the power of the collective to access the market
- Collective purchase of inputs, sharing of information
- Engaging with various stakeholders along the value chain
- Address health, poverty and unemployment

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Objectives of the study

- Profile black organic producers
- Compared production trends of organic producers
- Establish how black producers are coping with certification costs
- To find out the ability of producers in meeting the market demands
- Identify challenges of organic farmers

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Methodology

- Designed questionnaires
- Data collected from 15 producers
- Personal interviews (one to one)
- Interviews conducted in October 2010

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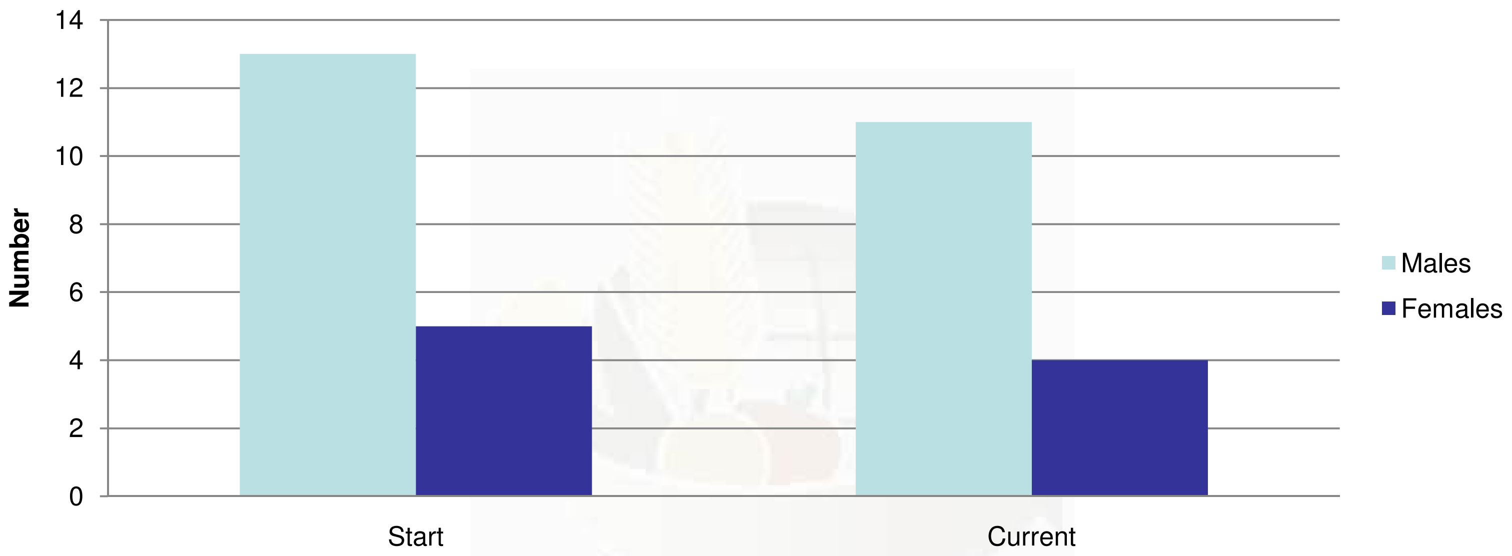
Results: Demographic information - Gender



- Gender: start (13 males & 5 females), currently (11 males & 4 females)
- Family youth labour (12 males & 9 females), currently (7 females & 11 males)

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Employment status – 2008 and 2009

Table 1: Temporary employment

Item	Start	Current
Males	19	25
Females	58	90
Total	77	115

Table 2 Permanent employment

Item	Start	Current
Males	28	31
Females	46	50
Total	74	81

- Temporary employment increased by 33%
- Permanent employment increased by 9%
- In both cases majority of labourers were females

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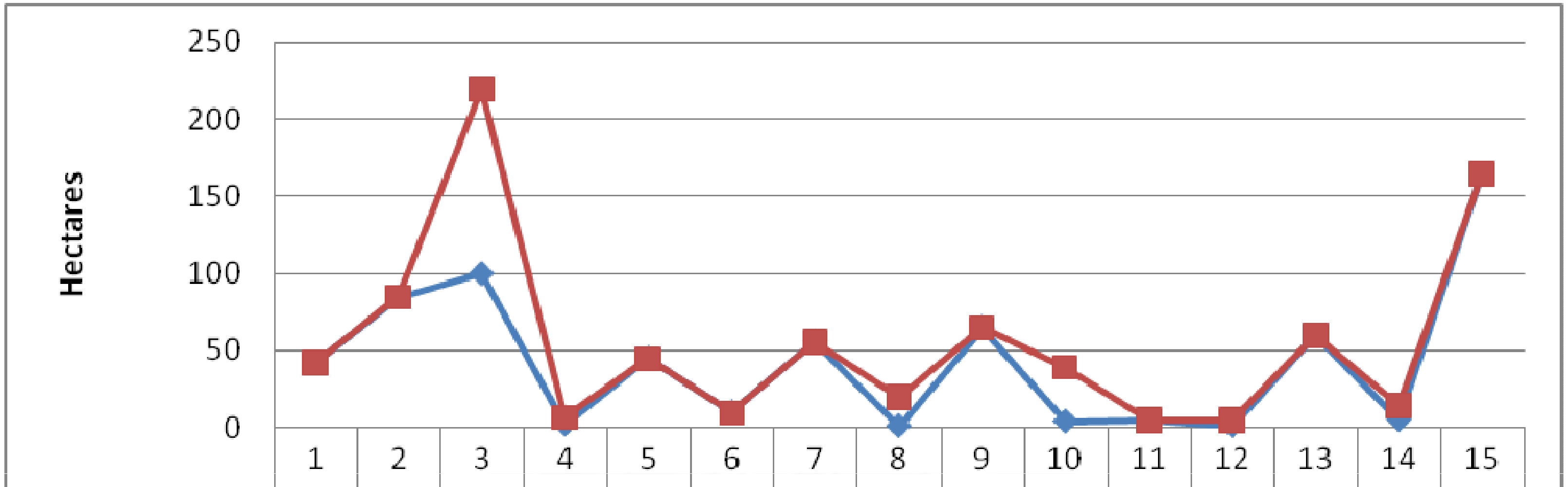
Farm size



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Start	42	85	100	2	45	10	56	1	65	4	5	1	60	5	165
Current	42	85	220	7	45	10	56	20	65	39.4	5	5	60	15	165

- At the start, 47% producers had between 1-10 ha,40% had 40-90ha and 13% had 100-170ha
- Currently 40% have between 5-20 ha, 47% have 40-90ha and 13% have 160-220 ha, however the local authorities could give 5ha as minimum ha and 42ha as maximum size
- Farmers who had 50ha and more had title deeds

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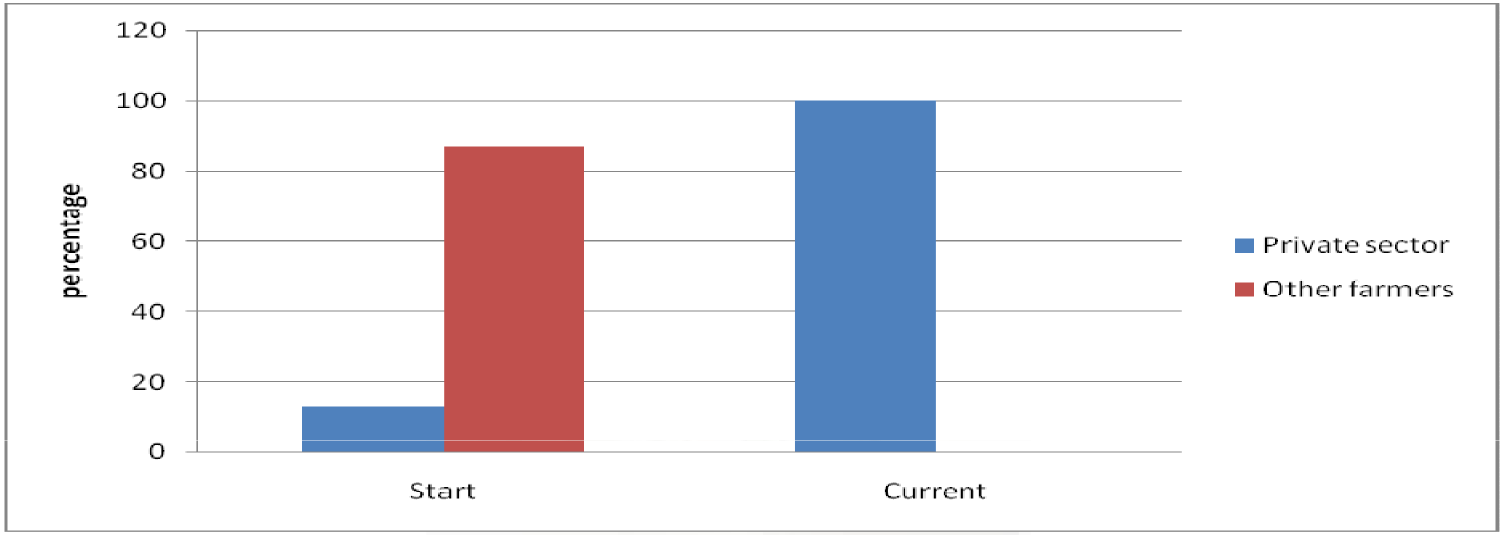
Training and provision of technical assistance



- In the initial stage farmers received training from ARC, SA academy, Hivos-from Woolworth
- Training was on compost making, planting methods, bookkeeping, diseases and pest control
- However, 87% of farmers at the start were advised by other farmers and 13% of farmers were advised by private institution
- Currently, technical assistant is solely provided by Woolworth Agronomist

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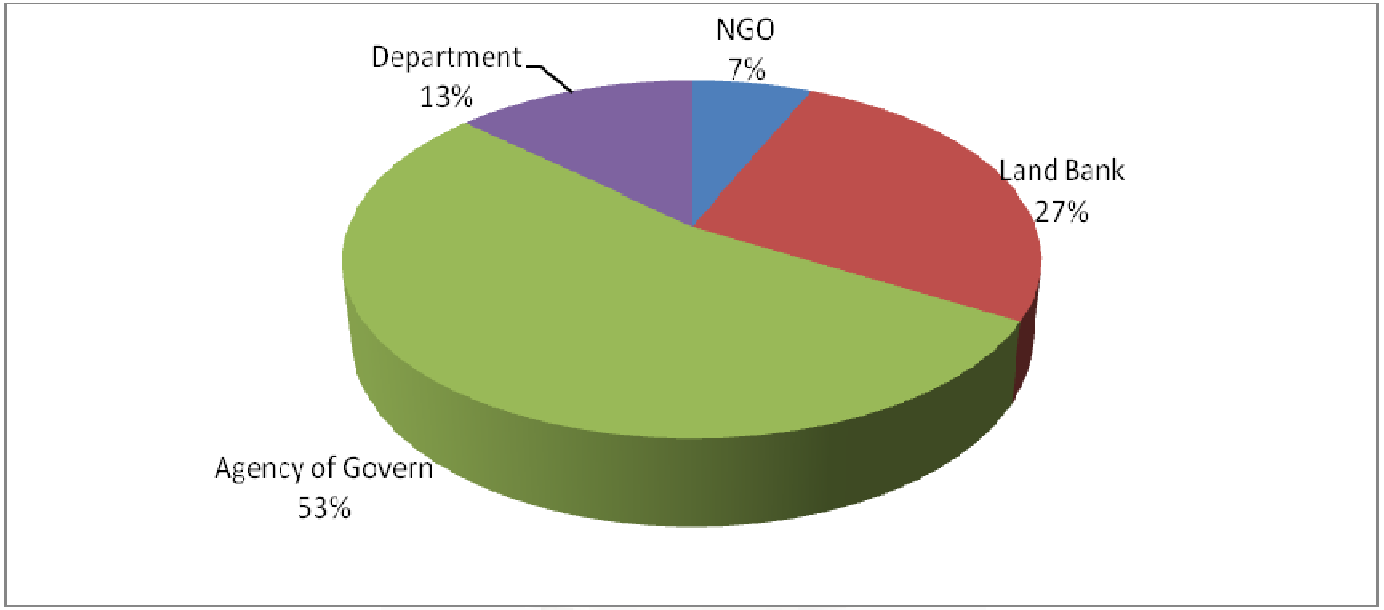
Organizational and government assistance



- LIBSA (government agency) assisted 53% of farmers with drip pipes, Limpopo government assisted 13% of the farmers with the drilling of boreholes, irrigation system and fencing
- Land bank assisted 27% of the farmers with production and long term loans
- NGOs assisted 7% of the farmers with netting

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Certification

- The Co-operative followed group certification
- Certifiers- BDOCA (2006) and BCS – (2007)
- First payment: R28 000 and R14 000 (annual fees)
- Quarterly audits – conducted by farmers
- International certifiers performs annual audit

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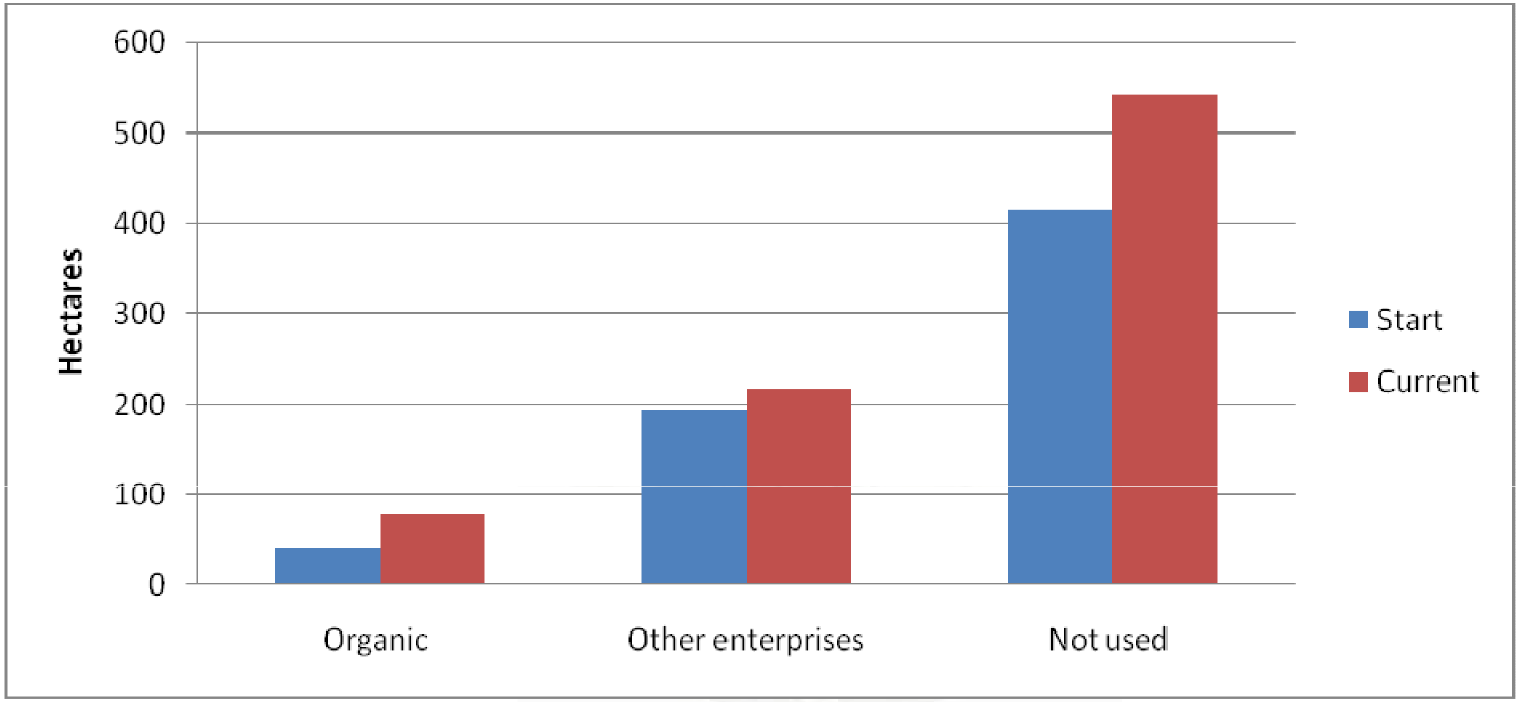
Land use



- At the start, 40ha was used for organic vegetables, currently 78.5ha is in use (6% vs 9% of the total land)
- 96% increase in land use for organic vegetables
- Other enterprises are broiler, fruits and livestock (30% vs 26%)
- 65% of land is not used for production

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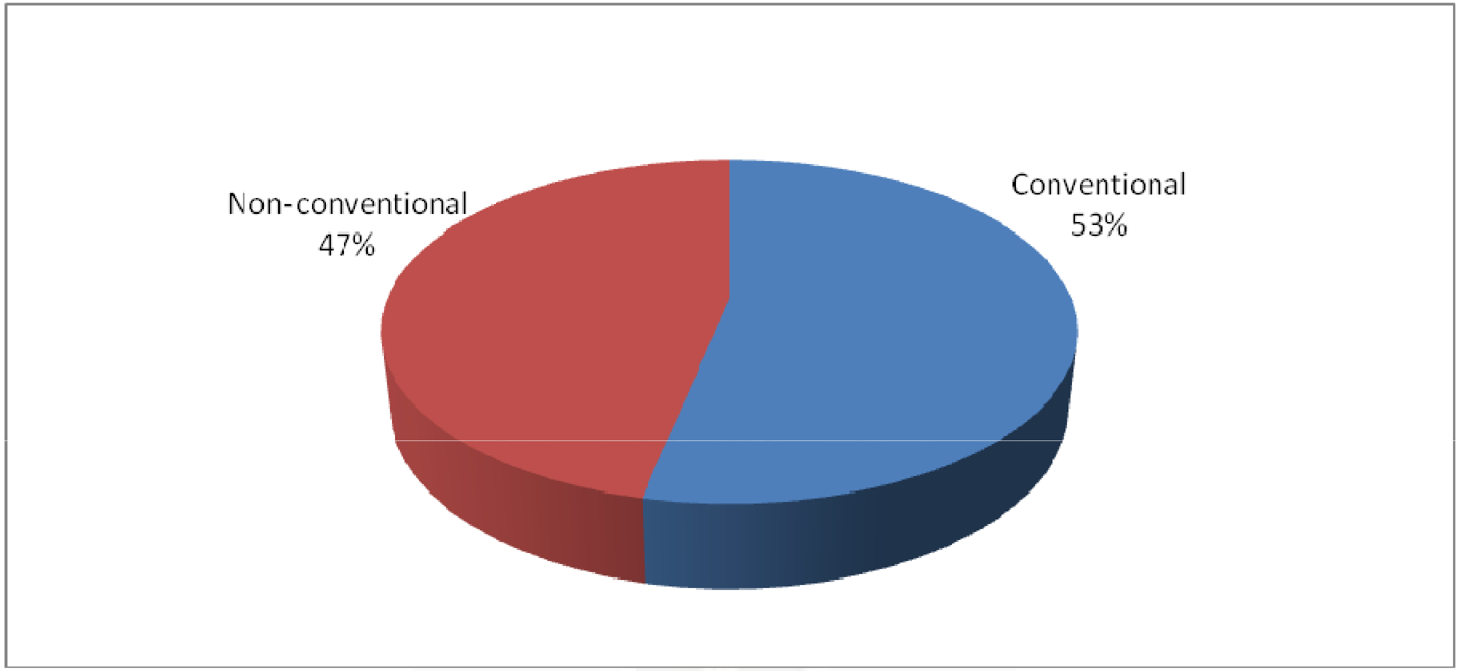
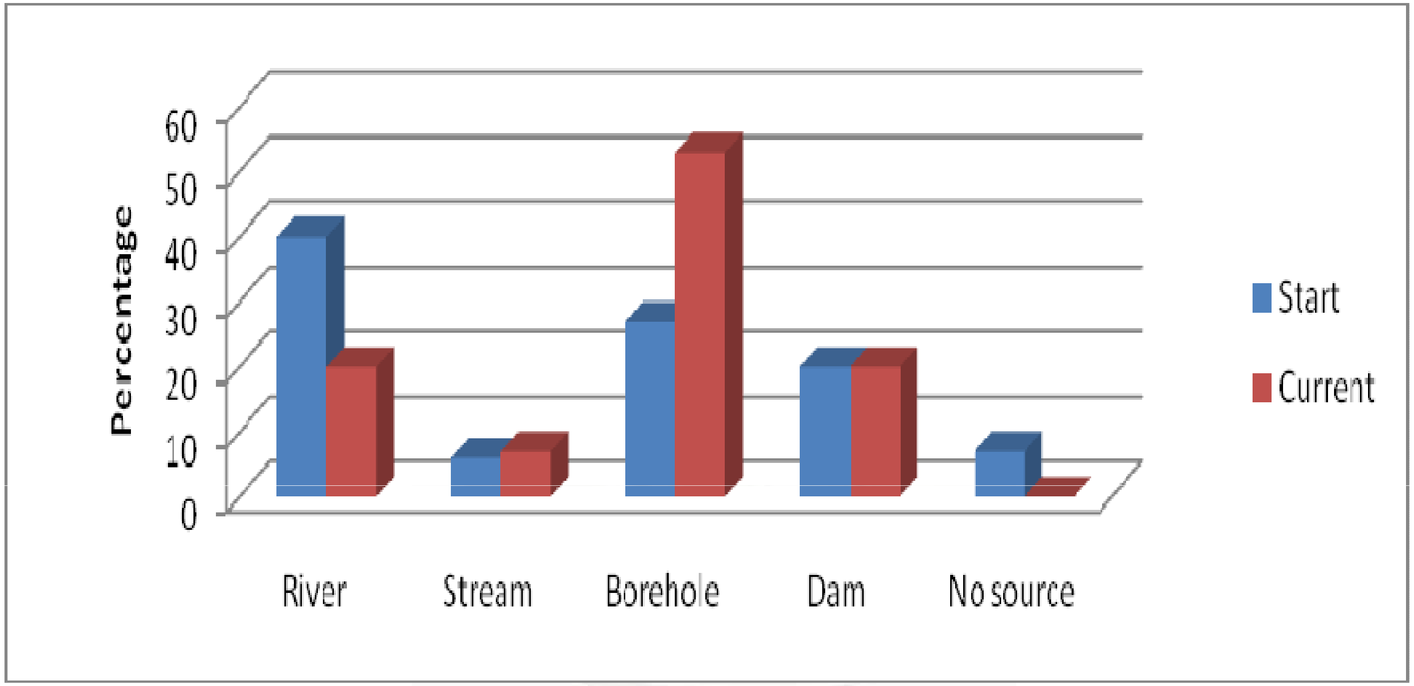
Farming methods



- Studies have found that many black producers farm organically by designs (Waart *et al.*, 2009)
- At the start, 47% of the producers practiced organic farming without certification
- Currently all farmers use non-conventional methods

Water source and status



- At the start, 40% of producers used river, 6% used stream, 27% used boreholes, 20% used dams and 7% did not have water sources
- Currently, 20% use river, 7% use streams, 53% use boreholes, 20% use dams currently all farmers have water sources
- Both at start and currently, water was never enough
- Farmers pay on average R200/month for water usage

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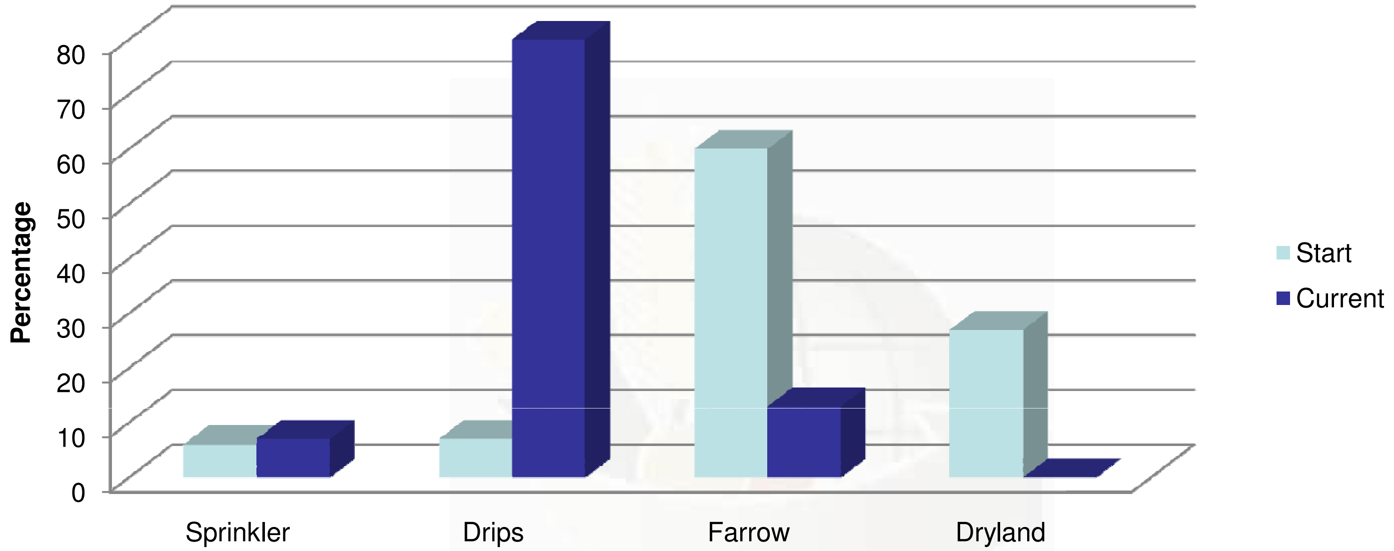
Irrigation methods



- At the start, 6% used sprinkles,7% used drip pipes,60% used furrow irrigation, 27% used dry land but this was for grains
- Currently, 7% use sprinkler, 80% use drip pipes and 13% use furrow
- Increase in use of drip pipes can be attributed to donation made by LIBSA
- Currently none of the farmers produce crops under dry land

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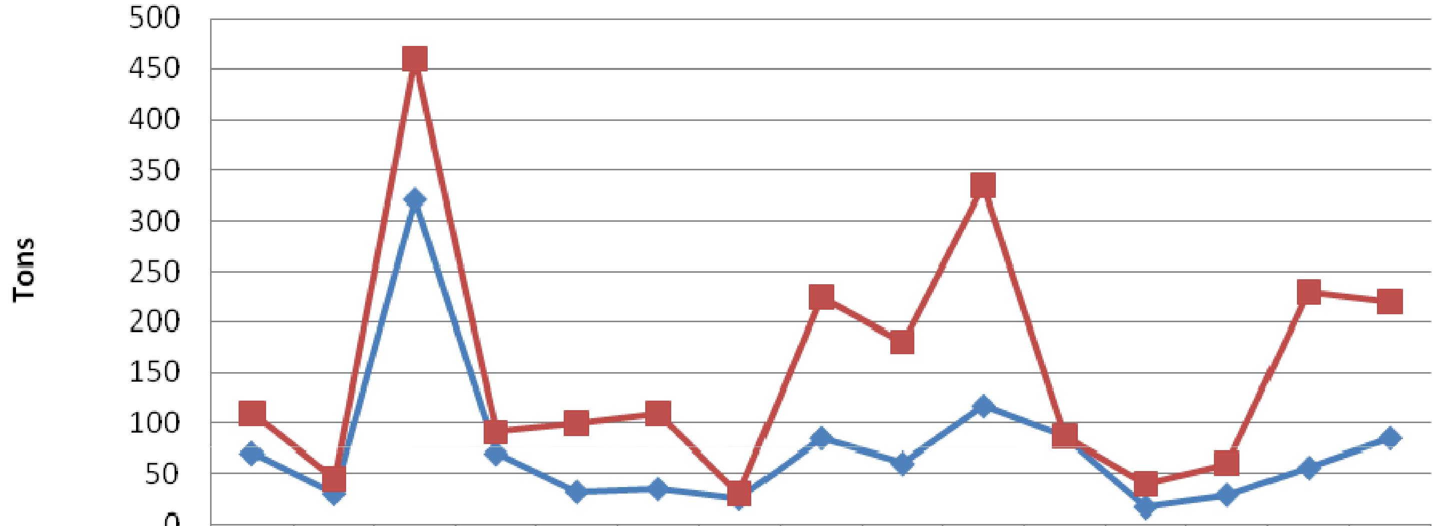
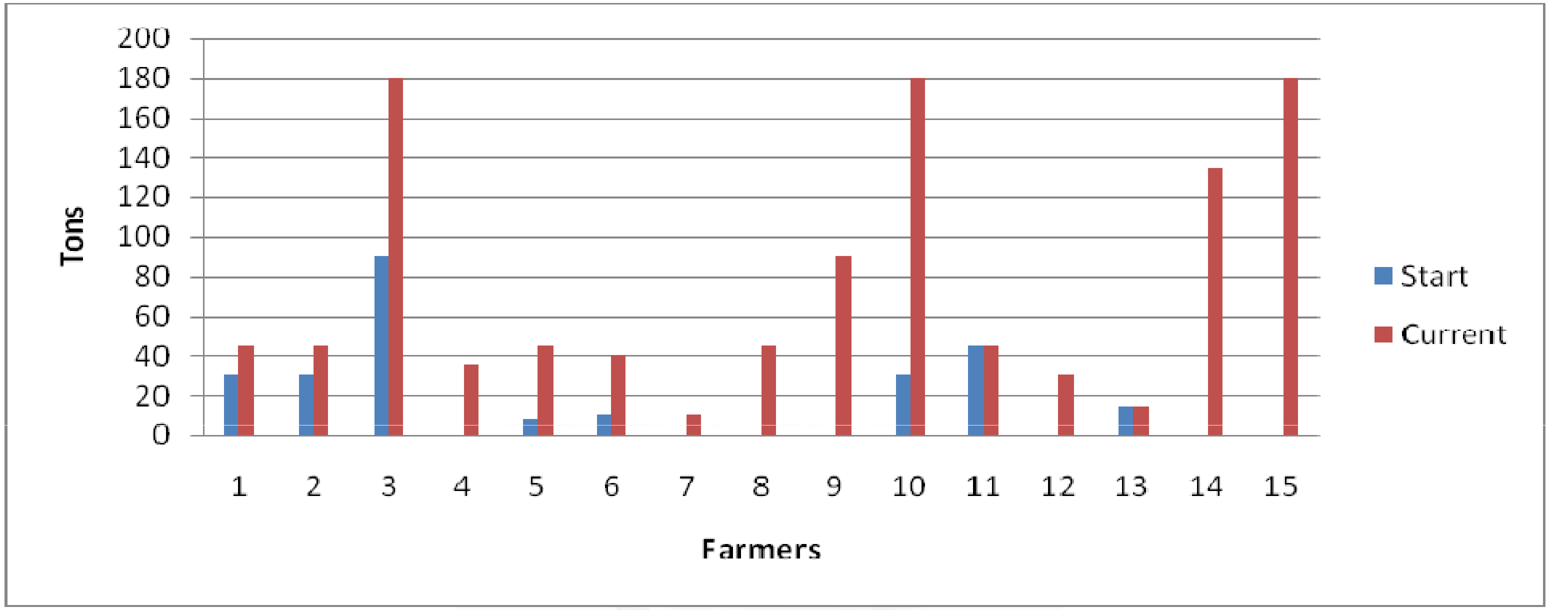
Total production volumes



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Start	70	30	320	70	32	35	25	85	60	117	87	17	29	56	85
Current	110	45	460	91	100	110	30	225	180	335	87	40	60	230	220

- Increase in production volumes, grew by 108% from 1118tons to 2323tons
- Highest volume at start of the project was 320tons, currently at 460tons
- This could be attributed to increase in land use and the extension support provided by Woolworth

Green beans: mostly produced commodity



- Green beans was produced by all farmers
- Other grown vegetables includes eggplants, sweet corn, butternuts, gem squash, all peppers and other vegetables
- Producers did not do well in other products
- Volumes could not be met for the market

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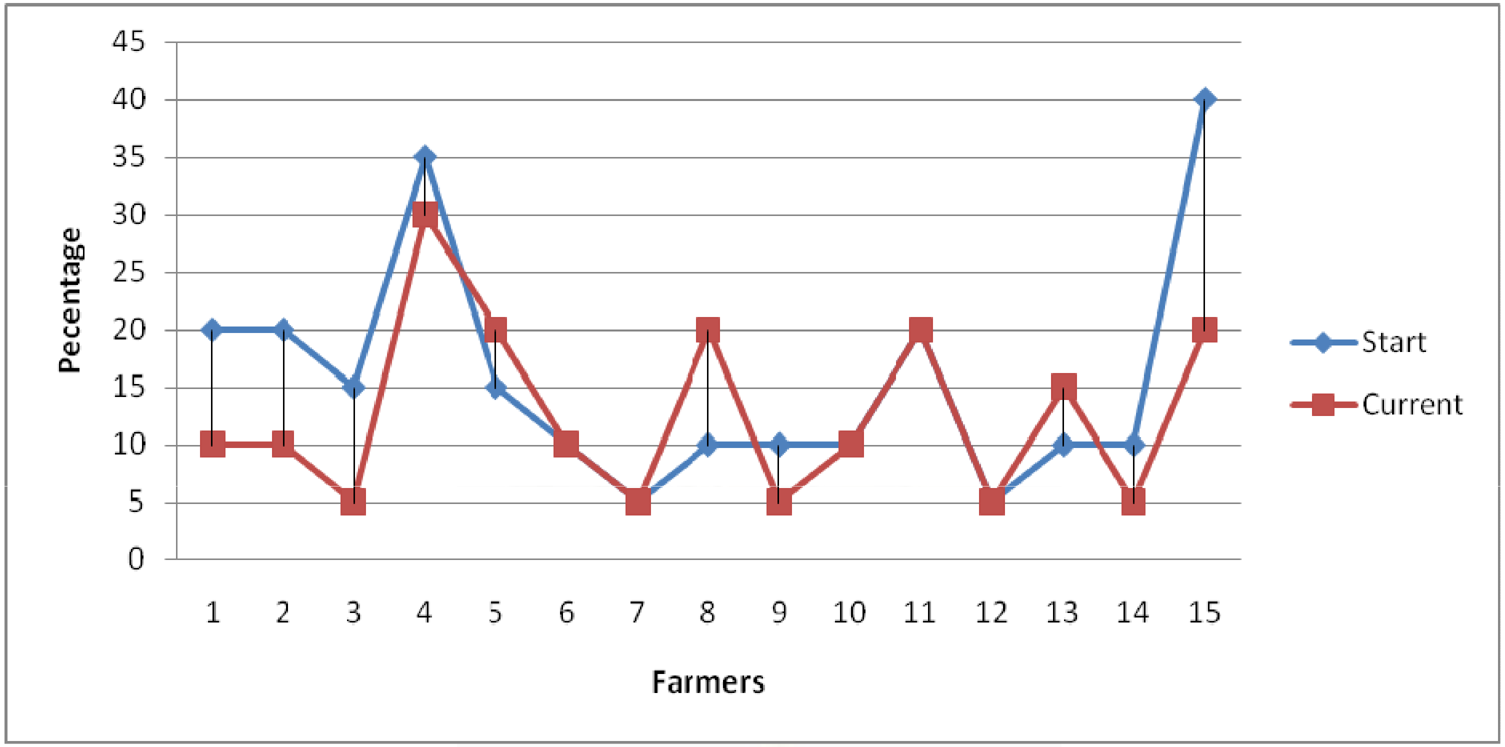
Production losses



- Individual losses at start were between 35% and 40%, currently the highest losses experienced range between 20% and 30%
- Cause of losses include wild and domestic animals, bad weather, late planting, pests and diseases

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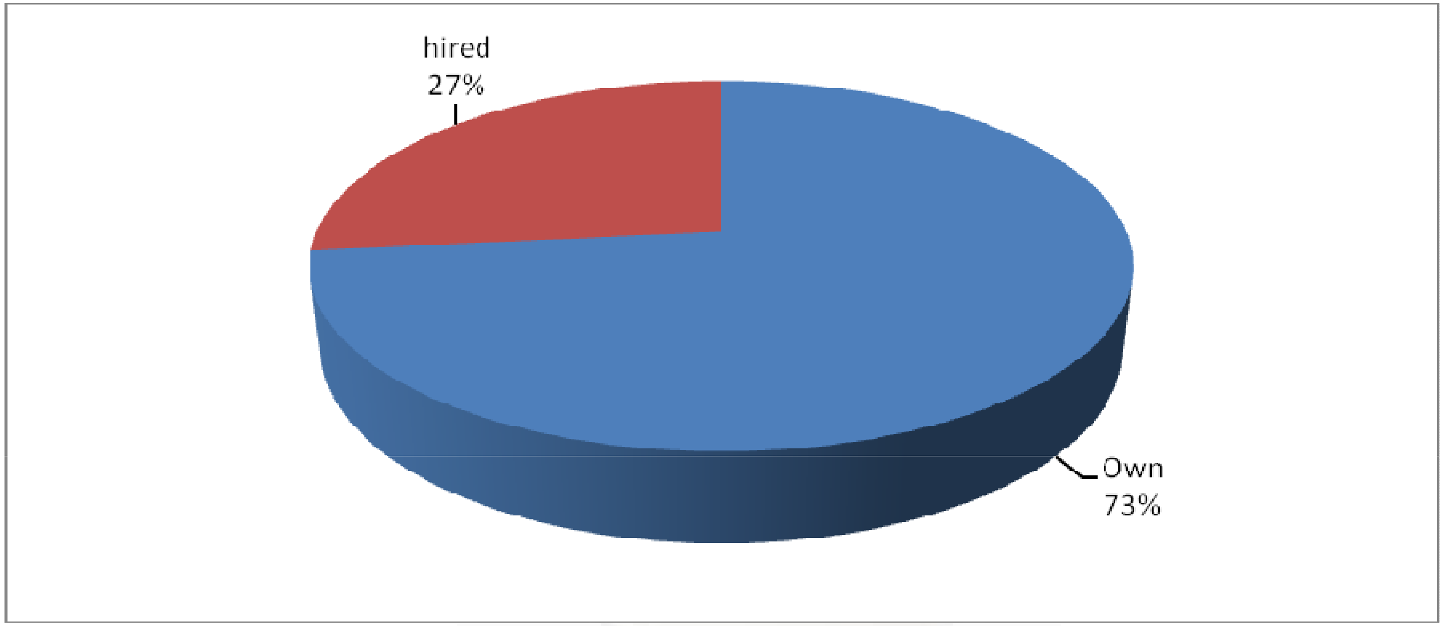
Transportation of produce to markets



- 73% of producers used their own transport and 27% hired transport
- Rotational transport system was found to be used among producers
- 1st grade products are delivered to Westfalia Packers – Woolworth
- 2nd grade products are delivered to Spar, Veg City, Mc Donald in Tzaneen
- C.P. Minnar and Sons, C.J. Clement were transportation hired to deliver 2nd grade product to other markets - NFPM

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Markets and prices

Table3: Green beans prices at Woolworth

Year	700 gram	350 gram
2008	8.26	5.15
2009	11.66	7.11

- Prices of commodities were fixed due to agreement with Woolworth
- Between 60-70% of the produce were sold to Woolworth
- Between 30-40% were sold to other markets often 2nd grade

Table4: Green beans prices at other markets

Markets	Unit	Average prices
NFPM	4kg	R25
Hawkers	12.5kg	R50
Consumers	700 gram	R10

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Returns from sales

- In 2009, total volume marketed for green beans was estimated at 1121tons

- 2323tons – 1121tons = 1202tons remained and includes all other vegetables

- Estimated turnover for green beans was at R19million for all the farms

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Success factors

- The formation of cooperative for engaging with various stakeholders along value chain
- Commodity grouping - collectives to access the market (volume of production)
- Training by various stakeholders
- Organizational assistance and government support
- Mechanisation scheme of LDA
- Involvement of local authorities – Land
- Provision of an Agronomist by Woolworth
- GLOBALGAP compliant
- Group certification for all of the members

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Challenges

- South Africa does not have legislation on organic production – expensive bodies used
- Infrastructure is a serious problem
- Farmers are not satisfied with Westfalia packers
- Lack of visibility by Agronomist from Woolworth
- Consumers education on organic production is lacking
- Distance to purchase organic inputs

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Recommendations

- DAFF should finalize the legislation on organic production

- Alternative and accredited pack-houses

- NAMC
- To co-ordinate with SEDA's for mentorship and other training
- To co-ordinate with other stakeholders for conducting feasibility study on pack-house

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Conclusion

- South African organic market study has showed that the demand for organic products is huge but supply is little due to few farmers that are practising organic farming
- Many consumers in South Africa are not aware of the benefits derived from organic production
- Organic farming offers high premium prices at specific market, however there are challenges
- In spite of challenges, Nkomamonta producers managed to produce organic products and concluded a contract with Woolworth

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