

Organic Vegetables Production: A Case Study of Nkomamonta Cooperative

Linking Farmers to Markets Focus Area

**Sydwell Lekgau
Senior Economist
MERC**

18/02/2011



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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



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

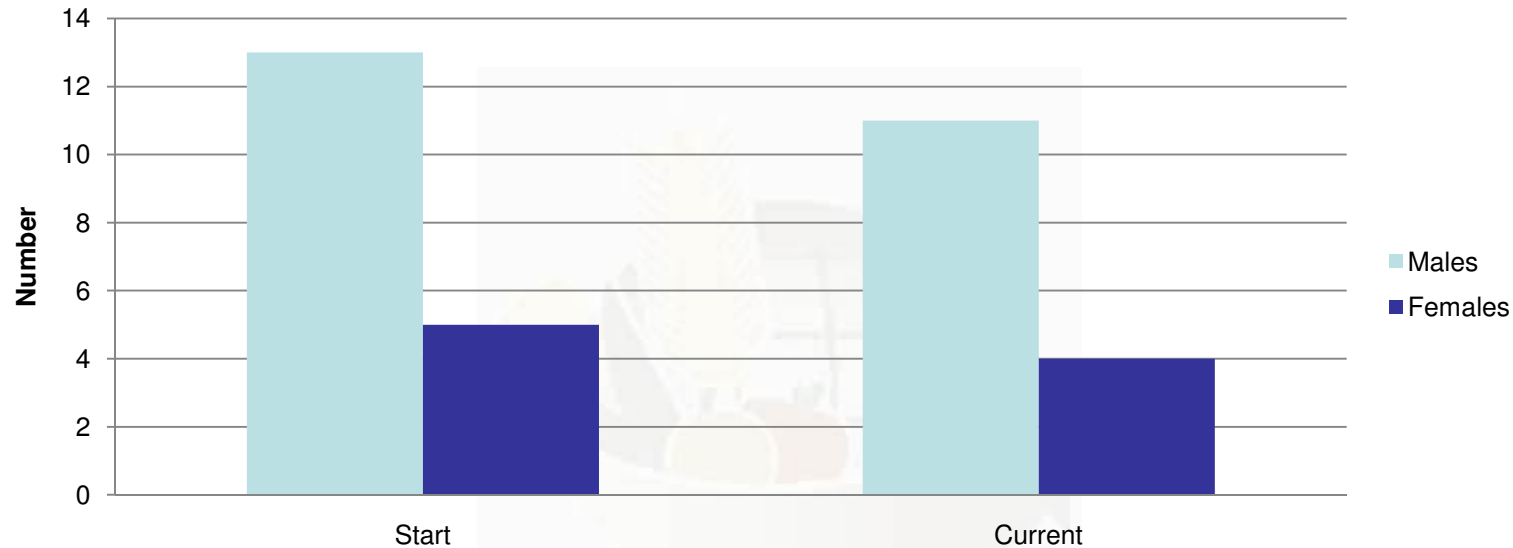
- Designed questionnaires
- Data collected from 15 producers
- Personal interviews (one to one)
- Interviews conducted in October 2010



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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

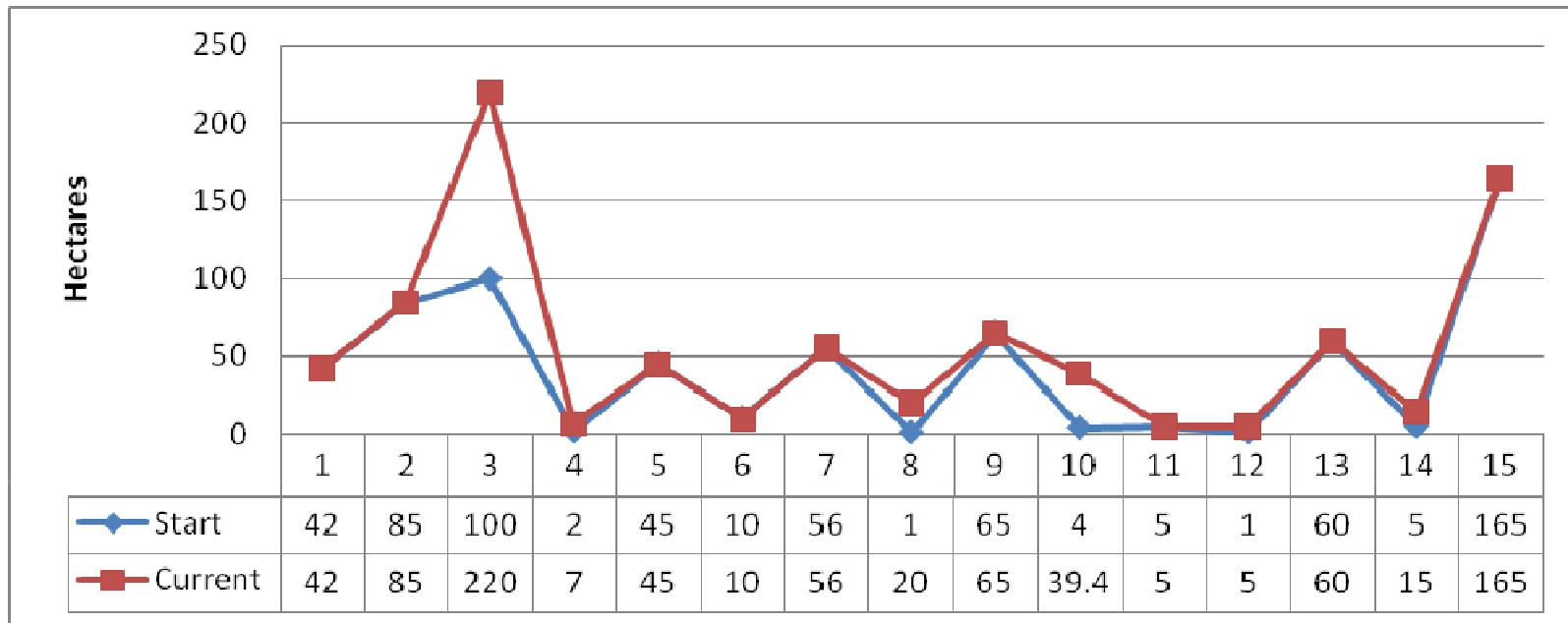
- Temporary employment increased by 33%
- Permanent employment increased by 9%
- In both cases majority of labourers were females



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Farm size



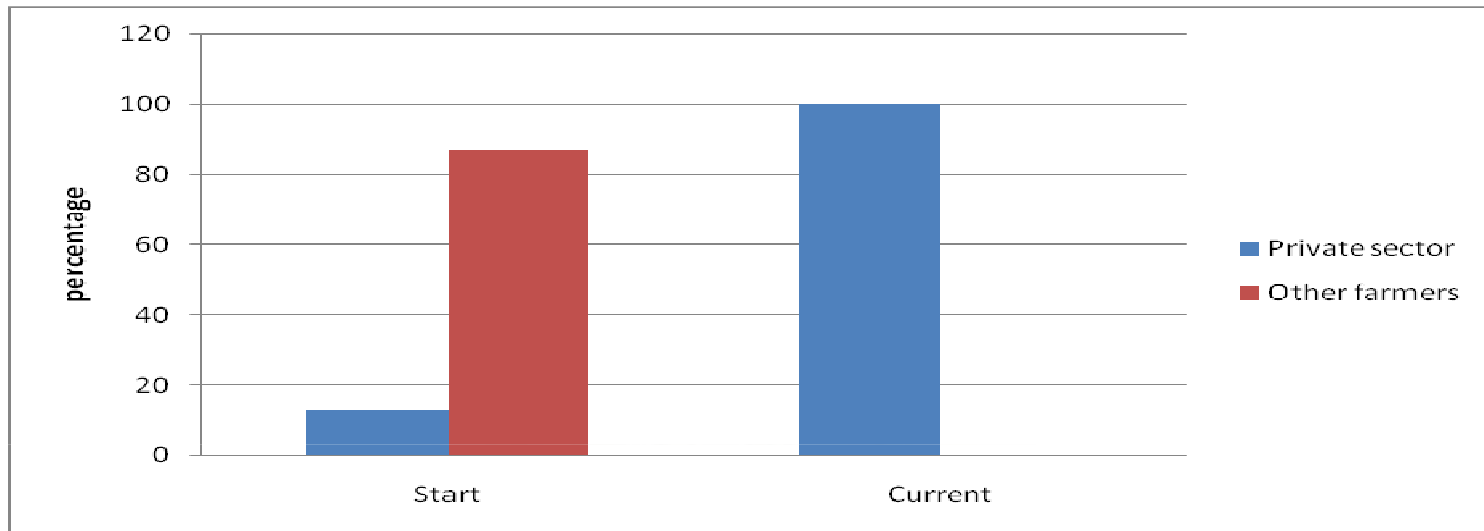
- At the start, 47% producers had between 1-10 ha, 40% had 40-90ha and 13% had 100-170ha
- Currently 40% have between 5-20 ha, 47% have 40-90ha and 13% have 160-220 ha, however the local authorities could give 5ha as minimum ha and 42ha as maximum size
- Farmers who had 50ha and more had title deeds



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Training and provision of technical assistance



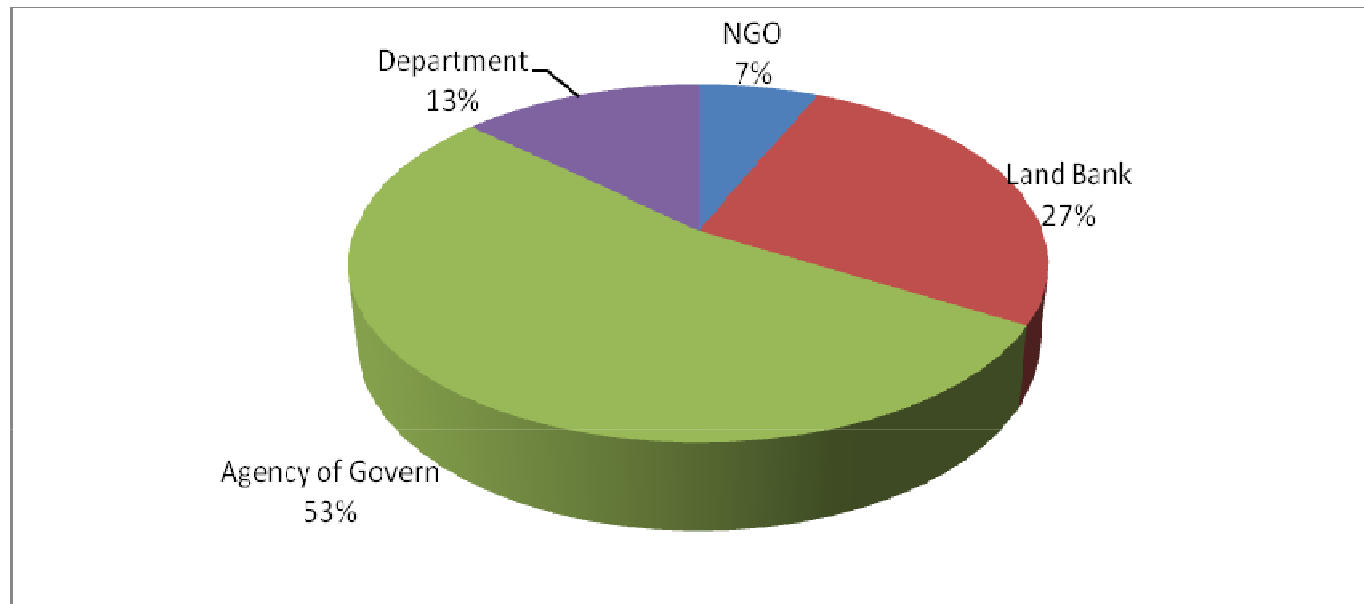
- In the initial stage farmers received training from ARC, SA academy, Hivos-from Woolworth
- Training was on compost making, planting methods, bookkeeping, diseases and pest control
- However, 87% of farmers at the start were advised by other farmers and 13% of farmers were advised by private institution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

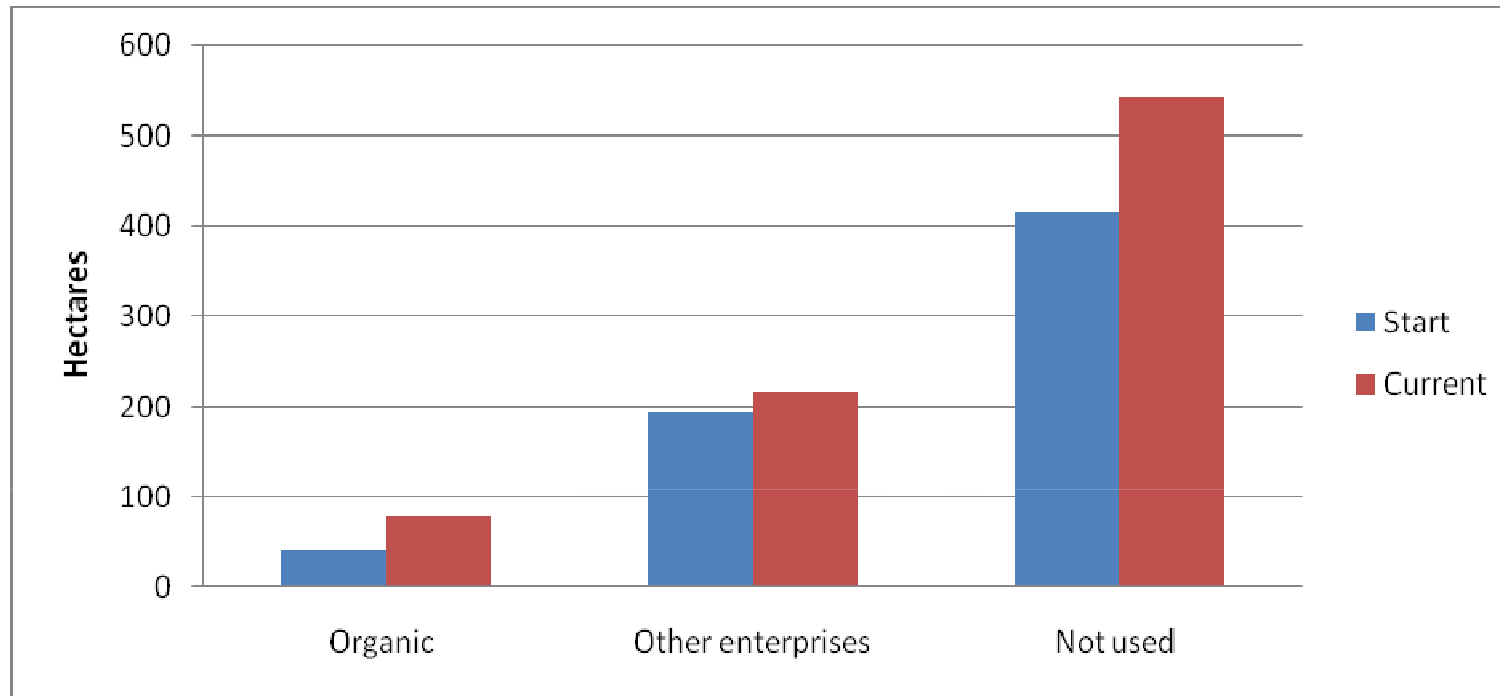
- The Co-operative followed group certification
- Certifiers- BDOCA (2006) and BCS – (2007)
- First payment: R28 000 and R14 000 (annual fees)
- Quarterly audits – conducted by farmers
- International certifiers performs annual audit



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Land use



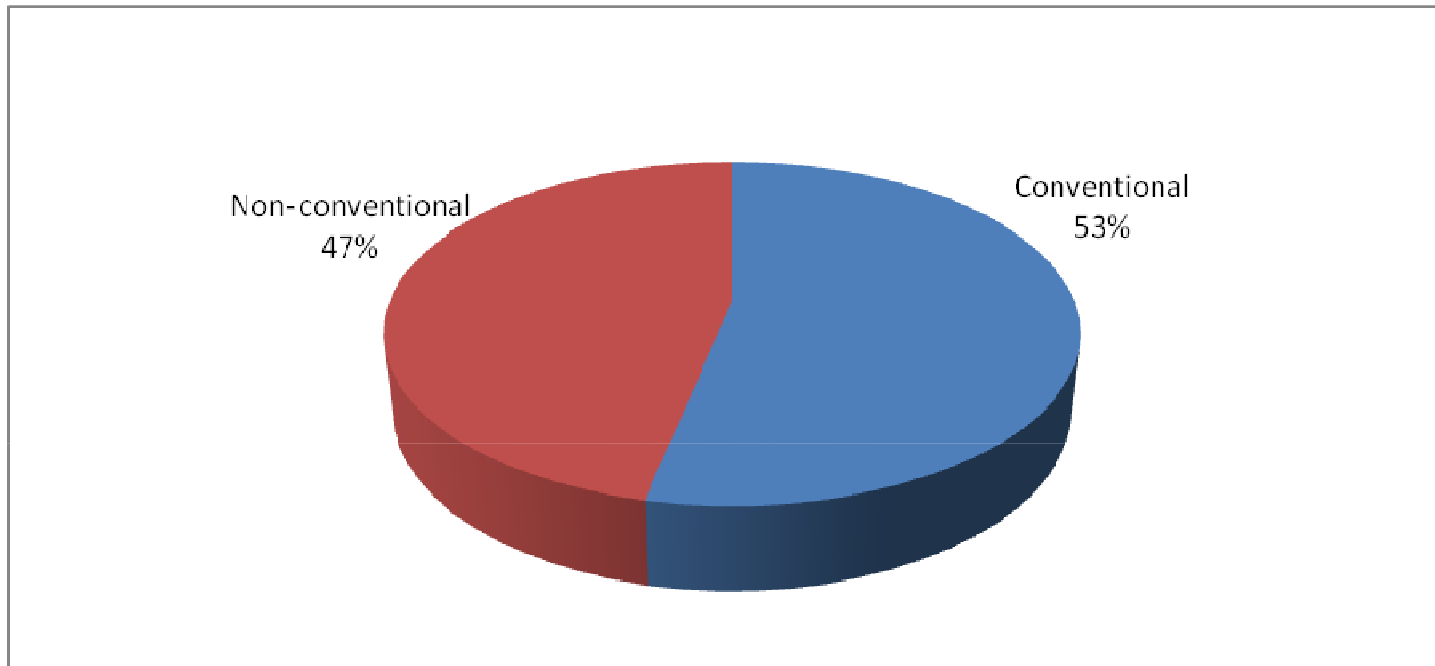
- At the start, 40ha was used for organic vegetables, currently 78.5ha is in use (6% vs 9% of the total land)
- 96% increase in land use for organic vegetables
- Other enterprises are broiler, fruits and livestock (30% vs 26%)
- 65% of land is not used for production



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Farming methods



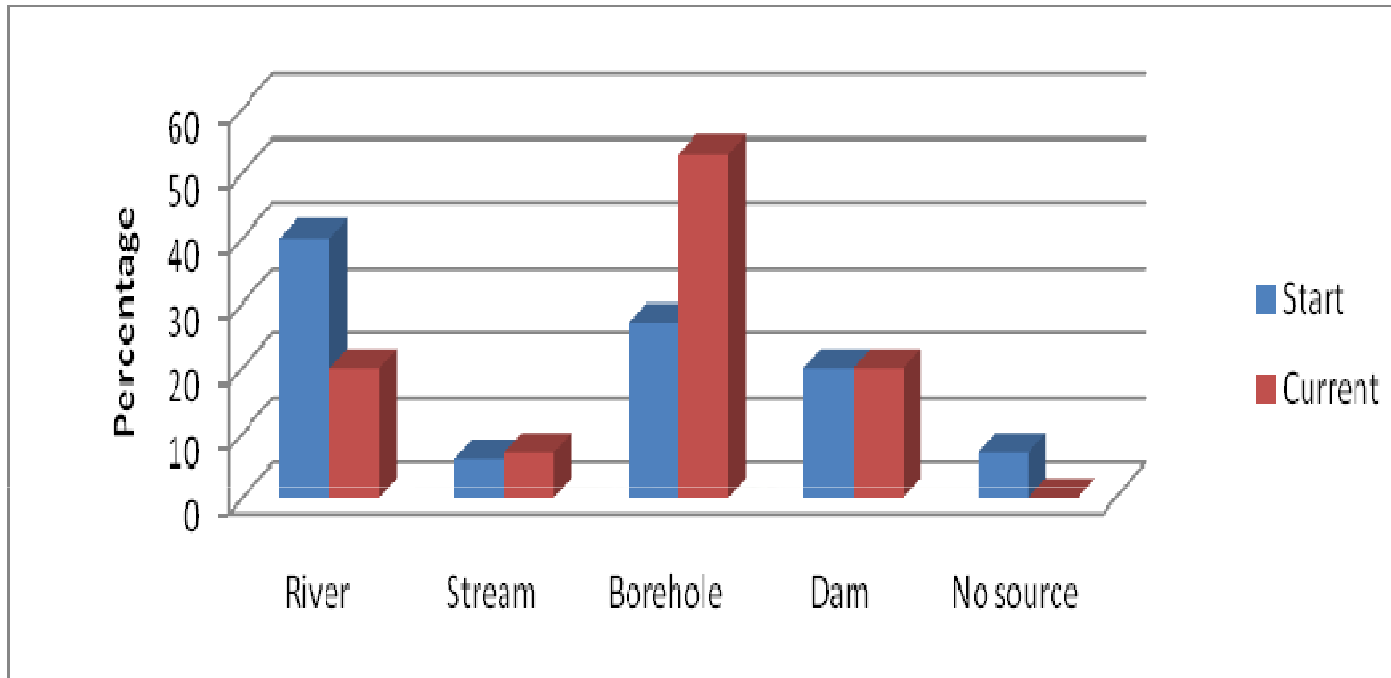
- Studies have found that many black producers farm organically by designs (Waart *et al.*, 2009)
- At the start, 47% of the producers practiced organic farming without certification
- Currently all farmers use non-conventional methods



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Water source and status



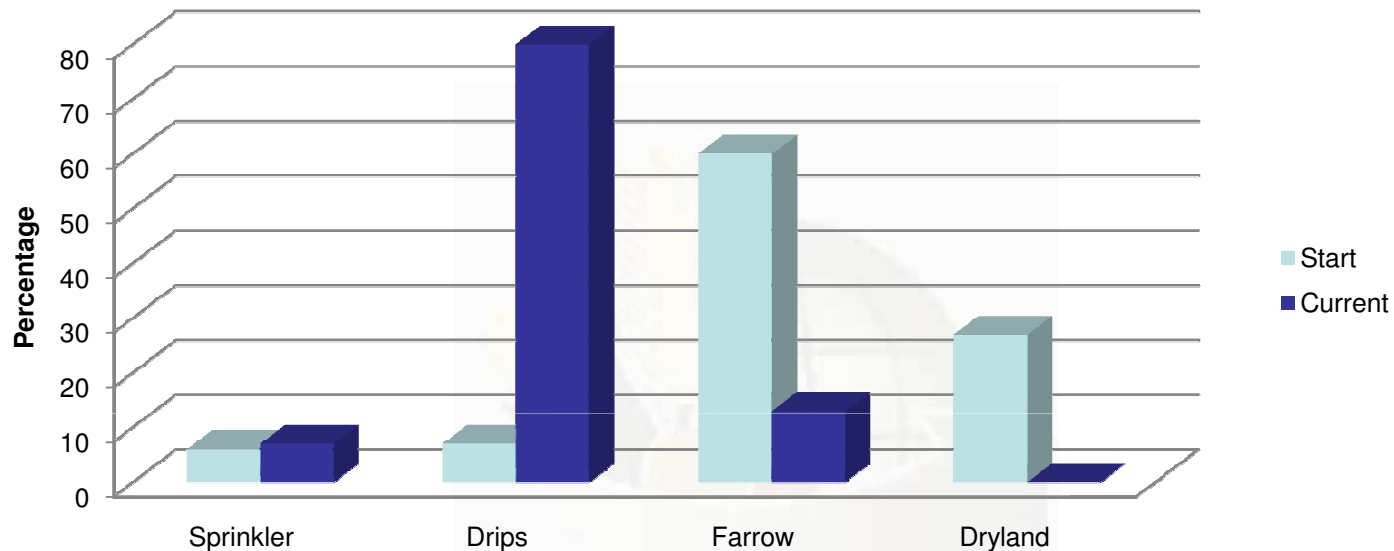
- At the start, 40% of producers used river, 6% used stream, 27% used boreholes, 20% used dams and 7% did not have water sources
- Currently, 20% use river, 7% use streams, 53% use boreholes, 20% use dams currently all farmers have water sources
- Both at start and currently, water was never enough
-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



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Irrigation methods



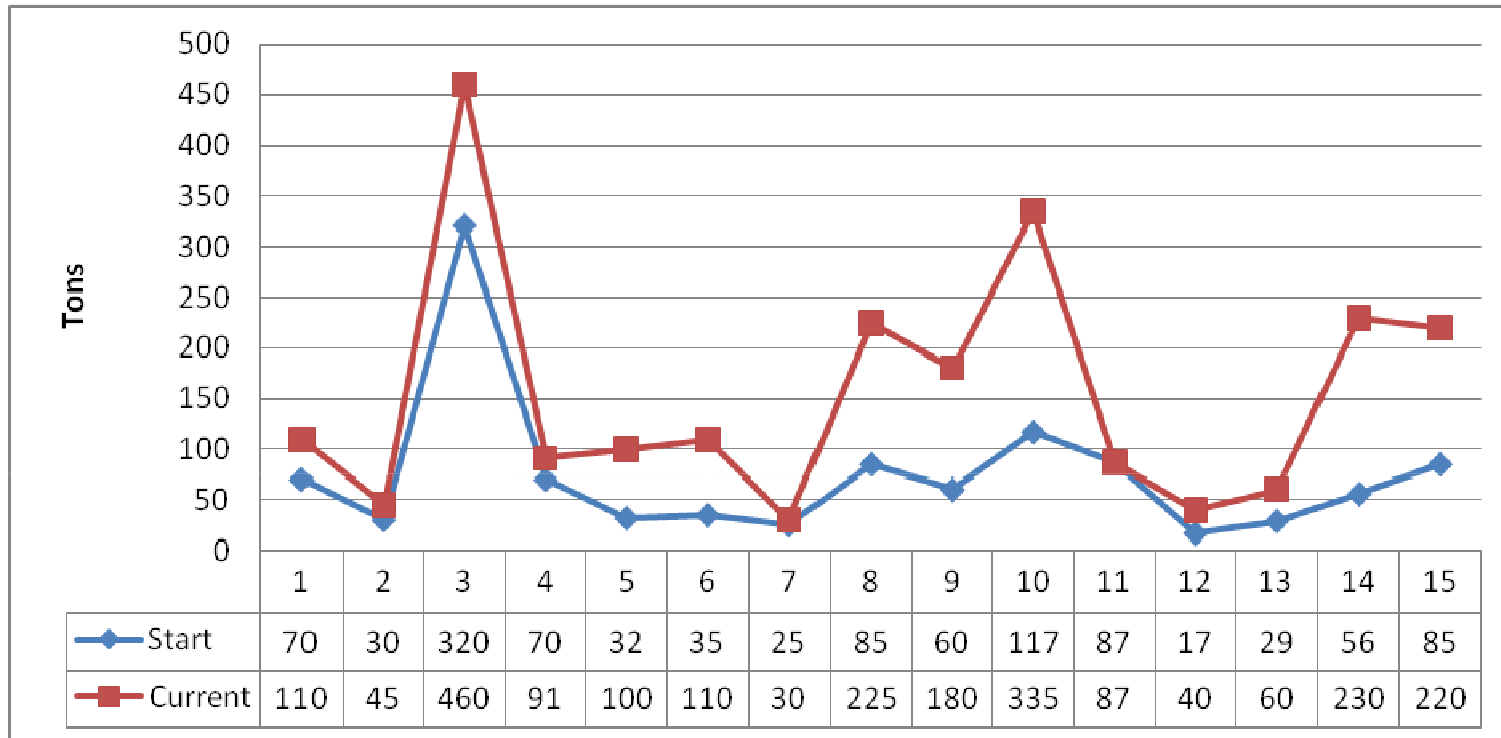
- At the start, 6% used sprinkles, 7% used drip pipes, 60% used furrow irrigation, 27% used dry land but this was for grains
- Currently, 7% use sprinkler, 80% use drip pipes and 13% use furrow
- Increase in use of drip pipes can be attributed to donation made by LIBSA
- Currently none of the farmers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



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Total production volumes



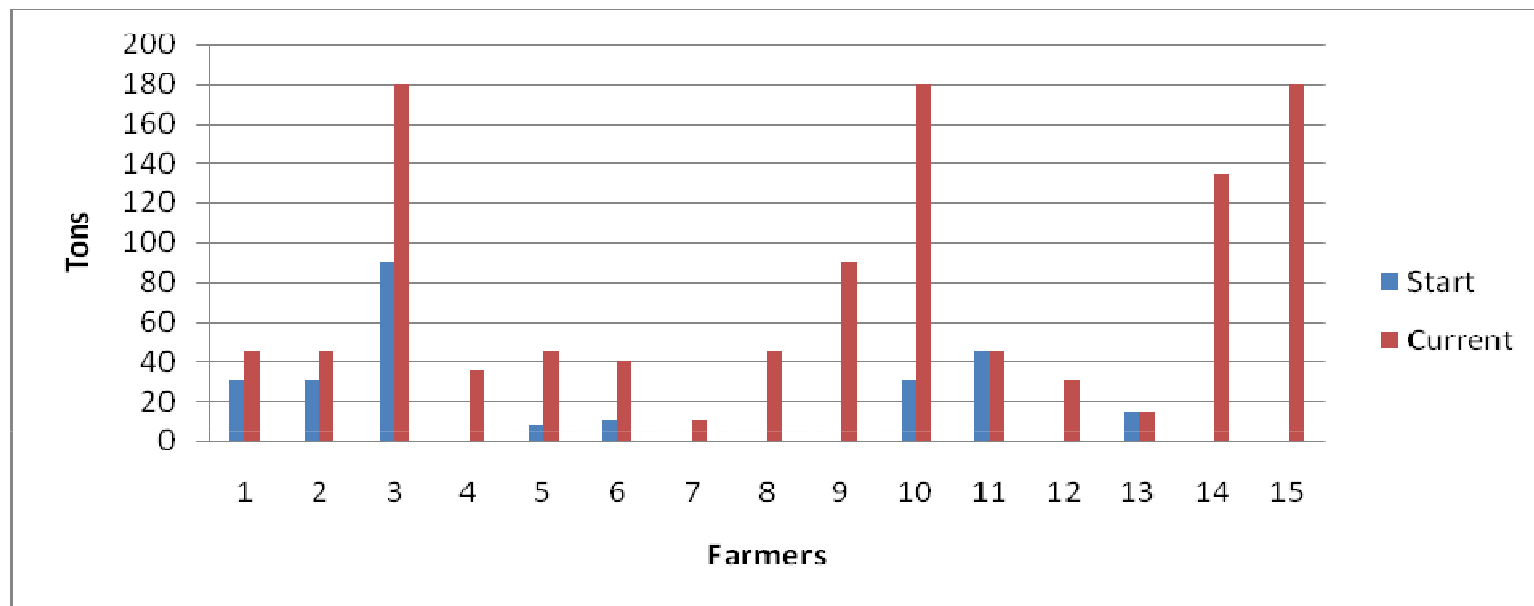
- Increase in production volumes, grew by 108% from 1118tons to 2323tons
- Highest volume at start of the project was 320tons, currently at 460tons
- This could be attributed to increase in land use and the extension support provided by Woolworth



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Green beans: mostly produced commodity



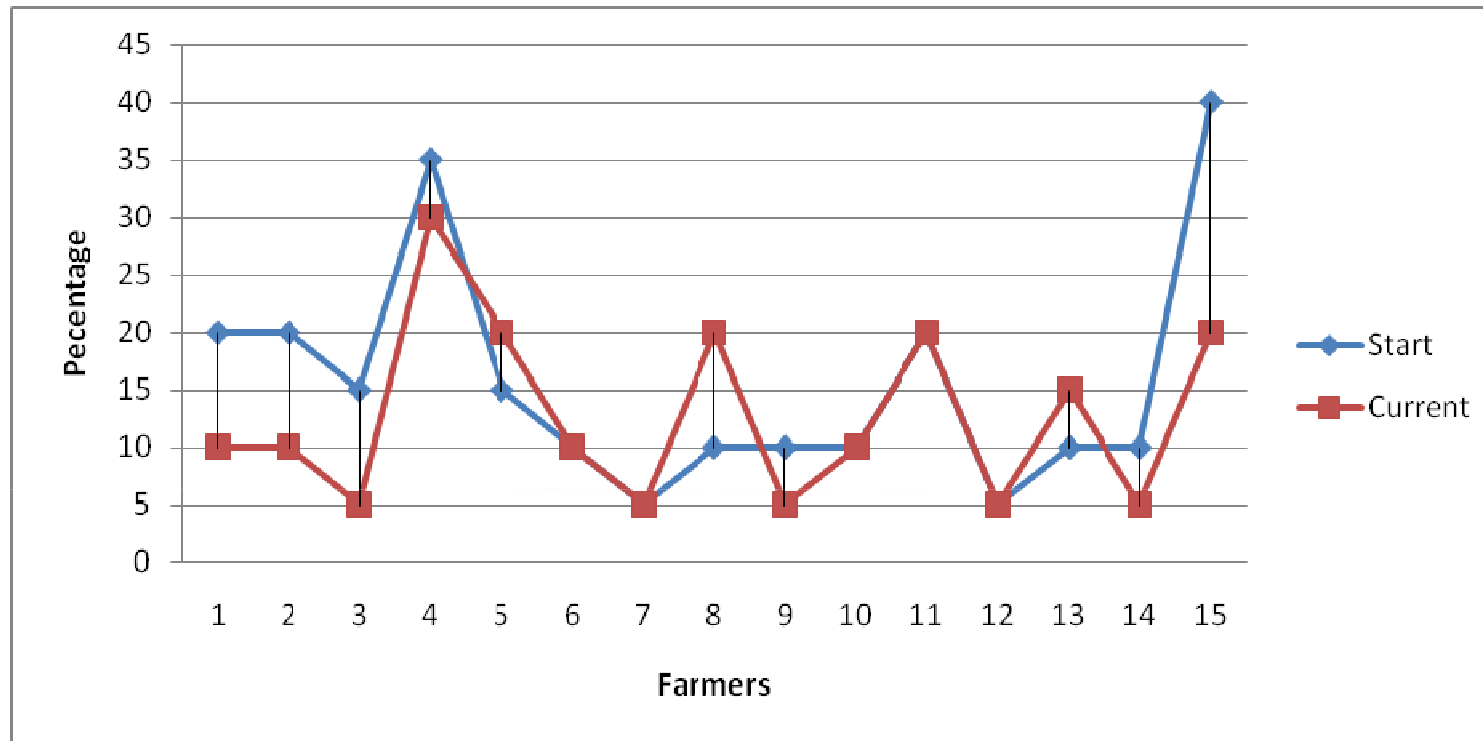
- Green beans was produced by all farmers
- Other grown vegetables includes eggplants, sweet corn, butternuts, gem squash, all peppers and other vegetables
- Producers did not do well in other products
- Volumes could not be met for the market



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Production losses



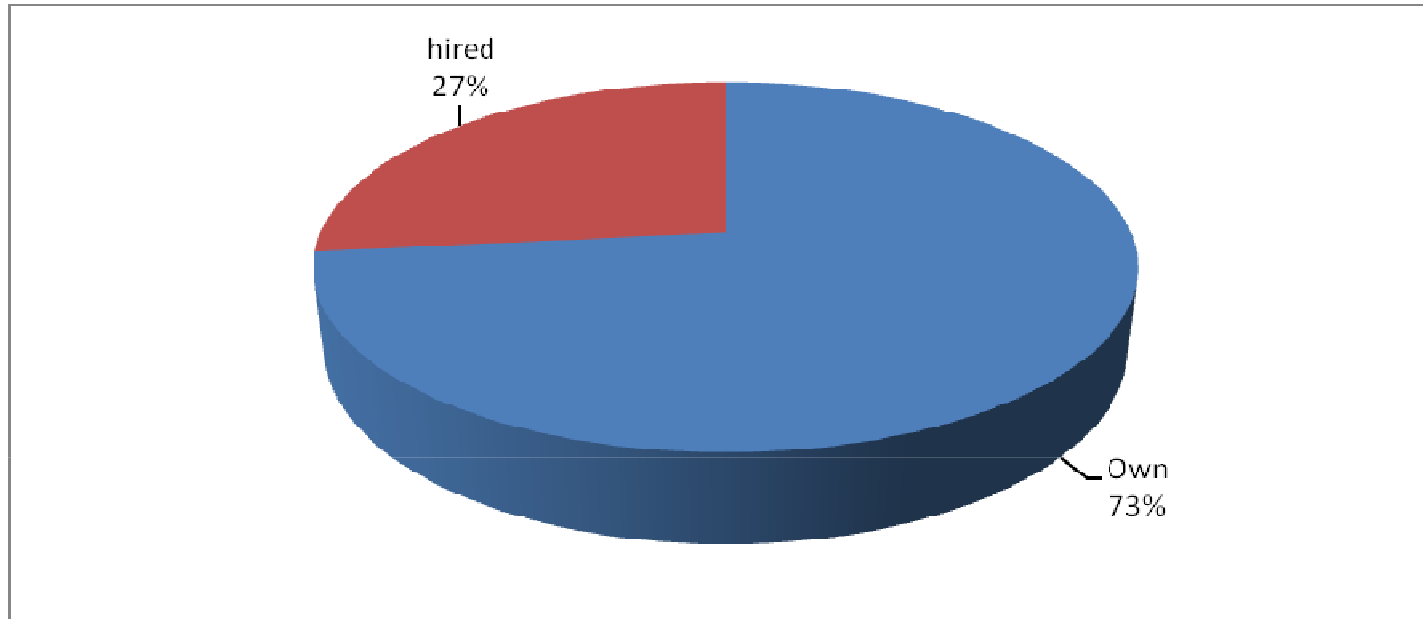
- Individual losses at start were between 35% and 40%, currently the highest losses experienced range between 20% and 30%
- Cause of losses include wild and domestic animals, bad weather, late planting, pests and diseases



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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

Returns from sales

- In 2009, total volume marketed for green beans was estimated at 1121tons
- $2323\text{tons} - 1121\text{tons} = 1202\text{tons}$ 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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