

Report on the Impacts of Floods on Eksteenskuil, Northern Cape, March 2011

This brief report has been compiled by academics from the Universities of Durham and Newcastle in the UK in collaboration with colleagues in South African research organisations¹. We are currently involved in a research project on the impacts of Fairtrade on raisin producers in Eksteenskuil, and our most recent period of field research has coincided with the floods. In what follows we outline the impacts on infrastructure and farmers, current assistance provided and issues requiring urgent attention. This is based on our observations, photographic evidence, interviews and discussions with farmers on the North, Middle and South Islands which form the Eksteenskuil community. Broader contextual information has been gathered via interviews with individuals from external organisations.

Flood Impacts

1. On vines and yields

- Farmers on all three islands have experienced damage to vines, including in some cases the complete loss of newly planted vines. In addition, farmers on North Island in particular have lost existing vines that were washed away.
- There has been significant damage to fields of lucerne and cotton (and in some cases complete inundation by flood waters) and also to fruit trees.
- There has been rampant weed growth in many areas.
- In almost all cases, yields of all crops have been substantially reduced.
- The quality of raisins has been affected, such that the percentage of 'Choice' grade has been reduced and the proportion of 'No Value' raisins has increased.
- As a consequence of the above, farmer incomes will be significantly reduced.
- The coincidence of floods with harvesting has had a negative effect on employment of seasonal workers who were unable to access the farms at critical times.
- There are likely to be secondary impacts as the high moisture levels have induced fungus in the new growth which will reduce yields in 2012.

2. On infrastructure

- Damage to power lines on North Island in particular.
- Damage to bridges on all islands: extreme damage on North Island, in particular.
- Extensive damage to existing roads, in particular on North and South Islands.
- Some irrigation channels have been broken, whilst others have been undermined.

¹ Please note that this report represents a snapshot of the key impacts of the floods upon the Eksteenskuil community as observed during two visits in early-February and early-March 2011. The core objective of the report is to document the situation in order to support local stakeholders as they engage with agencies seeking to provide targeted assistance via Relief Funds. Clearly the situation is currently a dynamic one in which the impacts are simultaneously shifting and becoming clearer. The core objective of the report is to document the situation in order to support local stakeholders as they engage with agencies seeking to provide targeted assistance via Relief Funds.

- Some flood embankments have been breached, whilst others have been weakened and require repair urgently.
- As a consequence of the above, farmers on all islands were cut off, which has prevented delivery of raisins to processors at optimal times. There are still parts of North Island that are inaccessible to vehicles.

3. On health and social issues

- Some communities have experienced difficulties in accessing medicines.
- The mobile clinic service has been severely disrupted with consequences for those requiring medical attention.
- There have been outbreaks of diarrhoea.
- Problems with mosquitoes and other insects due to the moisture levels and pools of stagnant water.
- Some children remain in hostel accommodation in Keimoes and some from North Island have not yet been able to return home.

Local Responses

- Residents worst affected by infrastructural damage are now playing an important role in temporary repairs of roads and bridges, in some cases with support from the Municipality.
- Some farmers have innovated in order to deliver their raisin crop to processors. This has involved helping each other, sharing equipment and, where bridges are still only accessible by foot, transferring raisins in sacks to bakkies on the other side of the channel.

Issues Requiring Urgent Attention

1. Repairs to infrastructure

- Further repairs to bridges (including emergency hanging bridges) and roads.
- Repair of power lines on North Island.
- The checking of all existing flood defences/embankments and the repair of those damaged or destroyed by the floods.
- Repair to irrigation channels.
- Provision of equipment to enable individual farmers to repair their own infrastructure (removal of flood debris and repair of fields and land).

2. Access to professional advice and agronomic inputs

- Assessments of the impacts upon the health of vines and support for remedial interventions.
- Support with spraying in order to mitigate the risk of disease.
- Support in terms of provision of herbicides and application equipment to kill weeds.
- Support with re-planting vines and other crops that have been severely damaged.
- Assistance in repairing/replenishing fields that have suffered soil removal.

- Financial advice and assistance with regard to managing existing debts in the context of reduced incomes from this and future years' harvests.
- Advice on localised flood defence and water run-off management strategies.

3. Healthcare

- Provision of access to clean water.
- Provision of access to medicines and medical supplies.

Suggested Longer-term Flood Planning Measures

- Establishment of a disaster planning committee or advisory board at Municipality level to ensure effective access for Eksteenskuil residents to information and advice in the event of future floods.
- Development of a Disaster Management Plan for Eksteenskuil Agricultural Cooperative such that the impacts of natural hazards can be reduced.
- Effective management by the Department of Water Affairs of reservoir levels in advance of predicted floods.
- Establishment of an emergency relief fund by Eksteenskuil Agricultural Cooperative to provide support for its members in the event of future disasters.

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Categories of Flood Damage in Eksteenskuil, March 2011

Types of Infrastructural Damage



A severely damaged bridge on North Island



Water has swept away this road



Electricity lines down on North Island



This road was impassable for weeks



Irrigation channel at risk of collapse



The distant embankments have been damaged and will almost certainly not survive further pressure

Damage to crops



New vines have been badly damaged



Rampant weed growth



Lucerne crops will need replanting



Extreme damage to vines



Yields and vine health have been affected



Rains hampered drying lowering quality



New vines have been washed away



Vine roots have been exposed

Interruptions to Farming Activities



Farmers and workers could not access fields to harvest at the right time. Some people were stranded for weeks.

Short Term Responses to the Challenges



Emergency bridge repairs



Desperate farmers carrying their raisins