

BUILDING RESILIENCE INTO NORTHLAND'S PASTORAL FARMS

A resilient farm system is one that allows a farmer to ready their farm business to absorb the impact of unexpected events.

Floods, high rainfall, gales, winds, erosion, landslides and droughts are all features of adverse weather that might hit Northland. Why is it that some farmers come through these events better or worse than others? There is the 'physical aspect' – some farms are just more prone to some events such as flooding. There is also the 'farmer aspect' – the resilience of a farmer to adverse weather is highly linked to their awareness, planning and actions undertaken.

This info sheet summarises how Northland farmers perceived the risks of weather events and what they did about them.

CLIMATE SWINGS

Due to its long and narrow geography, Northland is a region prone to the impacts of adverse weather events, particularly the backlash of cyclones and severe local storms like tornados. It is not uncommon to hear about extreme rain, wind and flooding events in Northland. Cyclones such as Bola, Giselle, Drena and Fergus have also left their impact as well as sizable storms in 2007, and since, which have caused considerable localised damage.

Northland has also had exposure to extreme dry spells. The recent 2009/10 drought has reminded Northlanders of the harsh impact of droughts. Long time Northland farmers recall earlier droughts in 1945 and 1982/3. It is evident that over the last decade there has been an increasing frequency of adverse events. NIWA predict more volatile weather in the future.

KEY MESSAGES

- Adverse weather events can hurt you, your family, your stock and your farm business.
- Planning will not only soften the physical damage on farm but also the impact on your family and finances.
- You are not alone. Other farmers are facing or have faced similar issues. Talking to other farmers helps you and them.
- Adverse events may not happen in isolation – you may have to deal with several serious problems at one time (e.g. drought and low stock prices).



THE ACTIONS OF PRO-ACTIVE FARMERS

Equip to be farm ready

Consider what you will need in an emergency. Do you have enough materials on hand to deal with fences that are down, blocked drains, fallen trees, roofs blown off, loss of farm access ways etc.

Consider what is needed for the longer term. Do all paddocks have adequate water supply in case of drought? What happens if the power is lost and you can't pump water or run the milking shed? Evaluate the need for equipment such as backup pumps or generators. Is there feed security; do crops or conserved feed need to be considered as part of the farms feed strategy? Are there some low cost feed out systems you could use for bought in feed?

Consider what is needed in the shorter term. Do you have trees that are likely to fall down? Drains that need regular cleaning to keep clear? Loose iron on the shed that needs nailing down? It is much easier to do these jobs before they create an issue in the middle of a storm.

Stock and feed assessment and reassessment is vital

Stocking rates should be assessed prudently within consideration given to feed availability in the short and long term, and in relation to long term weather forecasting for the local area. More volatile weather should dictate that you plan for bigger feed buffers in terms of pasture cover or supplementary feed.

Act early and reassess regularly

With rough weather on the horizon, act in good time. For example: if at risk of flooding, shift stock to safe and secured ground, ensure culverts and drains are unblocked. If at risk of drought, consider destocking if stock numbers and likely feed supply don't match. Consider what other feed sources are available.



Secure access to clean water is vital for stock health and peace of mind during a drought.

Follow the weather

Short and long term forecasts are becoming increasingly more accurate. Farmers that followed local and national weather forecasts were able to better evaluate how weather would impact on farm or in their catchment.

Equip for personal home and safety readiness

Your farm is your family's home. Make sure you have an emergency plan and a stock of supplies in case an event isolates you without phone, power, water, food or access off farm.

Use local resources and services available to you

Find out what resources are available in your local community. Rural Support Trust, Regional Council, District Council and industry groups play key roles in supporting the rural community in times of emergency.

Know how to contact support groups. Have a list of emergency contacts. You don't want to be searching for numbers in an emergency. Neighbours, power company, phone company, farm contractors, farm workers, transport companies, consultants, industry representatives etc would be a good start to your list.



KEY ACTIONS DISCUSSED BY FARMERS:

FLOODING

- Fencing**
 - Install 1-2 wire fences next to flood prone waterways. These can be easily carried away but also easily replaced.
 - Debris needs to be cleared from fences to keep them secure.
- Equipment**
 - Ensure water pumps are out of reach of flood waters.
 - Ensure you have a backup plan if your milking shed is damaged or without power.
 - Insure equipment.
- Stock**
 - Ensure stock is secure and moved to higher ground in good time.
 - Rotate stock between flat and higher ground to ensure even grazing but higher stock security if flats flood.
 - Talk with neighbours about what to do about straying stock if farm fences can't keep them in or if they have been washed down river.
 - Consider adjusting stocking rates held seasonally if the farm is prone to exposure to wet conditions regularly.
- Farm setup**
 - Ensure that paddock gates are positioned for easy access if flood waters are high.
 - Consider the need for standoff pad or area.
- Pastures**
 - Pasture damage may depend on how long flood waters sit on paddocks or how much pugging damage is done if stock is held in one area for prolonged times.
 - Complete pasture renewal and soil drainage may be required.
 - Consider if other grass/crops might be suited to flood prone areas.
- Culverts**
 - Consider placement and design when installing relative to large volumes of water moving through these in storm events.
 - Keep culverts and drains clear.

EROSION AND LANDSLIDES

- Farm tracks**
 - Design farm track layout with soil type in mind. Consider which areas of the farm may be prone to slippage.
 - Be prepared to have limited access to farm. Bikes or foot access may be only way around.
 - Cut fences where necessary to move stock if gates not positioned for easy access.
- Trees**
 - Consider planting trees to stabilise slip prone land.
- Equipment**
 - Have equipment on hand and contractors phone numbers so that access can be reinstalled quickly through the farm.

WIND

- Trees**
 - Cut down potentially dangerous trees that may fall in storm.
 - Plantings of trees provide shelter for stock.
- Sheds**
 - Make sure any farm buildings and equipment are secure eg no loose iron.

DROUGHTS

- Stock**
 - On sheep and beef farms destocking is usually the best course of action.
 - Consider early what stocking rates the farm can sustain with forecasted feed availability.
 - Think about how feed might be rationed. Different for different farm and stock types – some open gates and allow roaming, others need more control with strip grazing.
 - Match your stock classes to the type of land they are on.
- Feed**
 - Use predictive tools and previous experience to assist with feed assessments for the short and longer term.
 - Destock when required – but make timely decisions to ensure not always reactionary.
 - Make and store supplementary feed or have a plan to purchase.
 - Consider if there is a grass/crop that would aid the farm in drought conditions.
- Water**
 - Ensure stock access to water from every paddock.
 - Have tools and gear (pipes, joiners etc) on hand for emergency repairs.
 - Consider options of water storage e.g. dams.
- Shelter**
 - Trees and planted areas can provide valuable shelter and shade.

NETWORKS

- Ensure you have an emergency contact list next to phone.
- Link with neighbours and local networks to get and give assistance.

FAMILY SECURITY

- Ensure the family home is secure with heat, water, food, radio etc.
- Have a civil emergency kit put together.

DIVERSIFICATION OF INCOME

Farmers had a wide range of strategies here including:

- Working off farm (or having a partner working off farm)
- Carrying different stock types or classes
- Focusing on market trends and farm stock management strategy
- Off-farm investments

TOP 7 PRINCIPLES TO DEVELOPING RESILIENT FARMS IN NORTHLAND

1. Physical limitations are unique to every farm and region

Understand the physical aspects of the farm and local area that may be at risk to adverse weather events.

2. Early risk assessment and decision making is vital

Assess potential weaknesses of your farming business to a sudden or extended adverse event and address any issues or actions arising.

3. Have a Plan B

Develop a flexible stock policy so you can cope with changes in market value of stock.

4. Be aware of fast and slow weather cycles and their potential risks

Storms are quick events, they hit, do damage then leave. Droughts sneak up slowly and last longer, often doing substantial damage before it is realised.

5. Talk to other farmers.

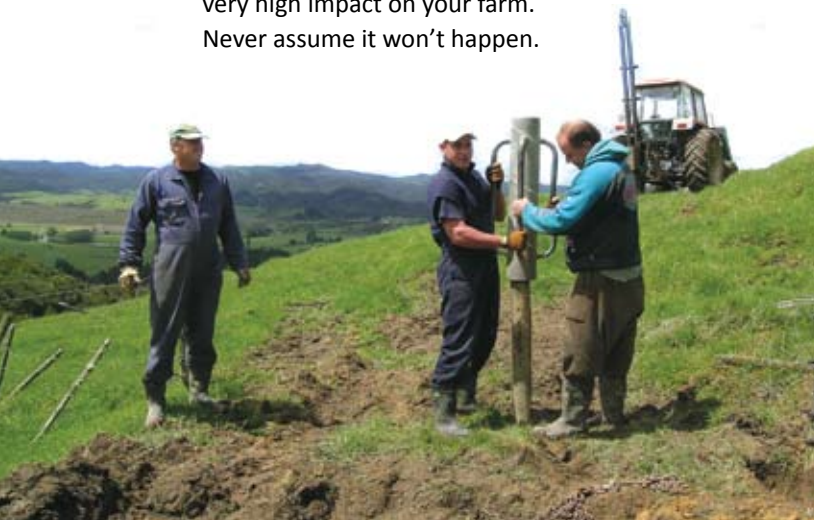
Farmers are not alone. Other farmers are often in the same situation or have been there before. Link into local networks in your farming and local community that are there to help/support.

6. Consider economic resilience

Consider if the farm income is diverse enough to withstand pressures beyond reasonable seasonal or annual fluctuations. Adverse weather events can add sudden and unexpected costs to the farm budget. When adverse weather is linked with low stock prices and this can have serious financial implications.

7. Plan for the unexpected

Some adverse weather events may occur very rarely in your local area. This may mean when a large unexpected event hits, it has very high impact on your farm. Never assume it won't happen.



CONCLUSION

- The more resilient you are to adverse weather events, the more secure your family and farm business will be.
- Identify the risks, assess the impact, and decide on an action. Become more resilient!
- Planning is essential for long term farm resilience.

Some key contacts include:

Police, fire or ambulance [111](tel:111)

Northland Rural Support Trust [0800 787 254](tel:0800787254)

Northland Regional Council [0800 002 004](tel:0800002004)

Beef + Lamb New Zealand [0800 696 328](tel:0800696328)

Federated Farmers [0800 327 646](tel:0800327646)

DairyNZ [0800 339 235](tel:0800339235)

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