

Hidden treasure on farmlands

By Michelle Nel

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African people have traditionally worked in harmony with wetlands – the only problem is now there are more people and commercial pressures, which are putting wetlands under increasing strain. However, the Mondi Wetlands Programme suggests that through wise use and proper management, it is still possible to gain many benefits from wetlands without destroying them.

Some wetlands are like a local mall: there are farmers tending their vegetable beds, herders jostling to get their cattle to some good grazing and women drawing water from little wells they've dug. A wetland can meet many needs and everyone wants a piece of the action. The Mondi Wetlands Project (MWP) understands that wetlands are a rich source of services and products and one cannot protect them with a hands-off approach. The project works with many sectors from large commercial forestry companies, through emerging farmers to community subsistence farmers and the message is the same – if you manage your wetlands properly you can 'harvest' benefits from them on a sustainable basis.

What is a wetland?

A 'wetland' is a family name given to a whole lot of different wet areas that occur from the top to the bottom of a river system. They include springs and seeps (where water comes out of the ground), marshes (standing water and grasses), floodplains (flat areas next to rivers), swamp forests (trees in water), mangrove swamps (swamps next to the sea) and estuaries (lagoons).

You will know you are dealing with a wetland if the soil is wet and if there are wetland plants such as bulrush, papyrus, iKhwane grass, iNcema or red swamp grass growing in the area. Some wetlands are always flooded, while others are wet only for part of the year but they will still have water loving plants growing around them and special, often dark wetland soils with reddish spots that look like flecks of rust (or mottles).

Why are wetlands so important?

Water, as every farmer knows, is South Africa's scarcest resource, and at current supply and demand, we will not have enough to meet the rising demands by 2030. Farmers who have wetlands on their land are thus extremely fortunate and the added bonus is they can use these areas wisely for other purposes besides water and still retain their essential water-protecting function.

What do wetlands give us?

Wetlands give us services for free:

- They help save water for the dry times.
- In times of flood, they hold the water and prevent damage
- Wetlands clean dirty water

Wetlands also give us products for free:

- Fish, frogs and plants for eating
- Grazing for animals
- Fibres for crafts
- Medicinal plants
- Opportunities for planting certain crops

Water supply – the number one reason to care of wetlands

Despite the importance of wetlands for managing water crucial for our survival, it is estimated that over 50% of South Africa's wetlands have already been destroyed by poor land management! The less water there is, the less viable farming is in the long term. Some farmers depend directly on the water they take out of their wetlands for irrigation. Perhaps you have a borehole on your land. It may well be fed by a wetland. If you drain your wetland you will lose water.

Water management – rather be safe than sorry

If we drain or over-utilise our wetlands we could be in for a nasty surprise during heavy rains. Wetlands are designed to attract and hold water. However, if your wetland no longer has the plants or stability to do this, your precious topsoil will simply wash away leaving behind an ugly gully which will be no good for grazing, cropping

or any other purpose. Heavy rains and floods will cause more damage on your farm than if your wetland was intact. The wise use of wetlands is thus almost like an insurance policy.

More reasons to value wetlands

Besides providing you with water, wetlands protect **biodiversity** which means many different kinds of creatures depend on them from those that live in the water, to insects and birds. Insects, frogs and birds are useful predators of pests. For the last three decades many different **foods** have been obtained from wetlands including crops (amadumbe), edible flowers (waterblommetjies) and frogs. **Fish trapping** in Kosi Bay is a good example of how indigenous South African people use their cultural knowledge to get food from wetlands. If you visit Kosi Bay in northern Zululand, you will see a network of traditional wooden fish traps built and maintained by local fisherman. There are many wetland plants used as **medicine**. For example 'river pumpkin' is commonly used to ease childbirth. Harvesting and weaving of wetland plants for making **crafts** is a common practice in rural communities.

Are there agricultural benefits?

Wetlands provide agricultural opportunities – mainly winter grazing and some opportunities for cropping and harvesting. In fact a wetland can carry up to five times as many animals as dryland but this has to be managed carefully to avoid overgrazing. Wetlands can provide rich beds for crops but once again great care must be taken. You should choose crops that don't mind wet conditions and plant them in the right parts of the wetland – not right in the middle which is more prone to flooding and erosion.

The golden rule

The rule of thumb has to be that whatever you do with wetlands, you mustn't disturb their general structure or water-conserving functions. This is what we mean by 'wise use'. It means obtaining the benefits without changing the way the wetland works in nature. Some examples of wise use include:

- Livestock grazing
- Water extraction such as watering animals and a little irrigation
- Limited cropping without making too many drains
- Harvesting materials for craft-making and building
- Harvesting medicinal plants
- Ecotourism
- Fishing

Some kinds of use are actually good for wetlands

Grazing, careful burning and harvesting wetland plants by hand for crafts at the right time of year can all help the wetland because excess plants are removed from the wetland and enable new plants to grow the following season. Wetland plants re-grow quickly after harvesting, especially when harvesting takes at the end of the growing season.

How does MWP work with emerging farmers?

"We build on the good management that is already practised by people," says MWP's co-ordinator for the Agriculture Programme, Damian Walters. "People generally have good indigenous knowledge about wetlands; they know in principle how to protect resources. However, we are facing increasing population pressures so we have to remind people to use their traditional methods, such as cultivating only small parts of the wetland or avoiding overgrazing."

Through the local agricultural extension officers, MWP tries to find 'model farmers' who are using a good mixture of traditional techniques that respect wetlands, with a little modern technology, so that their yields are more competitive. These farmers then serve as an example to the rest of the community. Workshops are organised to which neighbouring communities are invited which are then 'run' by these model farmers who share their knowledge with others.

The MWP Wise Use and Community Programmes help people use their wetlands sustainably. They work with the forestry, livestock and crop industries, and rural communities.

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