

PRESIDENTIAL DIRECTIVE CAB 2(B)/2013
- INTRODUCTION OF INTEGRATED FARMING IN
AGRICULTURAL LAND

1.0 INTRODUCTION

Government has through Presidential Directive Cab. 2 (B)/2012 dated 21st February 2013 approved the introduction of integrated farming on land allocated for agricultural use and the guidelines on implementation of integrated farming in agricultural land.

2.0 BACKGROUND

2.1 Botswana like most developing countries has the majority of the population living in rural areas. Many rural families are relatively poor and have limited access to a lot of other economic opportunities, hence, their heavy dependence on land and its resources for food, shelter, and fuel. The settlement pattern in Botswana is generally divided into three distinct areas, the villages, lands and grazing or cattle post areas. Land utilization in these areas is such that activities of one area are discouraged or not permitted in another area, e.g. pastoral activities are discouraged in the arable areas and arable related activities are discouraged in pastoral areas. This is to ensure that compatible land uses can be practiced in the advent of the current proven unavailability of labour that in the past took care to avert the conflicts.

2.2 The rapid growth of the population has put pressure on the land and demand for land has increased. The pressure on land has been exacerbated by the country's semi arid climate, low productive capacity of land, incessant droughts and the fact that most of the productive agricultural land is found mainly in the eastern part of the country. This therefore calls for a robust integrated land use planning approach or system. Land use planning must adapt to change, because as the national, regional, local community and individual aspirations grow and diversify there is bound to be competition for the available land resource.

- 2.3 The competition for land use is characterised by settlements expanding into masimo; arable fields/ masimo encroaching into grazing areas; cattleposts encroaching into wildlife (hunting) and gathering areas, mainly in Wildlife Management Areas. Similarly, the emerging non-traditional agricultural activities such as dairy, piggery, poultry, fisheries, beekeeping, horticulture etc, and wildlife and tourism activities exert pressure on the arable and grazing areas. These pose new challenges on land management in Botswana.
- 2.4 The current planning approach, which is sectoral in nature, does not encourage integration of uses and this does not enhance the diversification and productivity within the agriculture sector. Many Batswana have been allocated agricultural land in the form of arable fields and ranches, but currently they cannot use it for other agricultural activities to diversify within the agricultural sector. As a result, the land is not optimally used.
- 2.5 Farmers wishing to introduce other productive agricultural activities on land allocated to them have to seek permission from the Land Authorities who, in most cases, do not favourably consider such requests in a bid to protect the arable or pastoral agriculture sub sectors. As a result farmers are sometimes compelled to seek additional land elsewhere, further creating land shortage which may otherwise not arise with integrated farming. Integrated farming is practicing the various agricultural enterprises (arable, small stock, beef, etc), which are compatible and support each other in an enclosed parcel of land.
- 2.6 The obvious advantages of integrated farming are that it allows the landholder to concentrate production efforts on a single piece of land, thus saving the farmer labour and costs in developing more than one piece of land. It also creates opportunity to improve overall land productivity and to use waste material of one component to improve other components

at the least cost. It facilitates production of a variety of food and sources of nutrition for the households while at the same time providing flow of income to the farmer round the year.

- 2.7 Whilst there are advantages to this approach, there are concerns that if not approached with caution, the multiple use of masimo and ranches for various agricultural activities may impact negatively on cereal, horticultural and beef production. The limited good arable or range land may be taken over by other uses which do not necessarily need those resources. Food security is of utmost importance and should not be ignored during the process. Therefore the implementation of integrated farming will require protection of existing major commercial production zones for cereal and horticulture production.
- 2.8 At various fora that the Ministry addressed, farmers have always expressed the need to have an integrated farming system. The guidelines have been prepared in consultation with Ministry of Agriculture and are intended to guide the implementation of the Integrated Farming.

**GUIDELINES ON INTRODUCTION OF INTEGRATED FARMING
IN AGRICULTURAL LAND**

1.0 What is Integrated Farming?

Integrated Farming is practicing the various agricultural enterprises (arable, small stock, beef, etc), which are compatible and support each other in an enclosed parcel of land.

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2.0 IMPLEMENTATION GUIDELINES

2.1 Zones for Specialized Commercial Farming

Prime areas zoned for specialized commercial farming should not be exempted from integrated farming.

2.1.1. Livestock Ranches/Game Farms

Proportion of land to be used for integrated farming within ranches and game farms should be left open.

2.1.2. Designated Crop Production Farms (Horticulture included)

- a. Livestock (cattle, goats, sheep and equines) is permitted in designated crop production farms provided the methods of upkeep and husbandry are compatible with the land use.

- b. Intensive agriculture enterprises (poultry, piggery, beekeeping and fisheries) can be integrated.

2.2 Mixed Farming Areas

This refers to land parcels located in communal land adjacent and around cities, urban centres, villages, peri-urban centres, and highly density areas/districts which are used for various agricultural activities.

- a. Land parcels allocated for agriculture shall be allocated as Integrated Farms.
- b. Land allocations for Integrated Farms shall be done under both Customary and Common Law Land Grant.
- c. Land allocated for Integrated Farms must be fenced in order to practice integrated farming. The fence should be such that it contains all farming activities within the farm
- d. All land use activities shall be confined to the fenced land parcel.
- e. In Drift/Cluster fenced areas, individuals who wish to engage in Integrated Farming shall be required to fence their land parcels to avoid conflict with neighbours.
- f. These uses shall include homesteads\farm house, storage facilities, poultry, arable/fodder production and agro-tourism.
- g. In order for existing arable fields to qualify for integrated farming, they must be fenced. Once fenced, Integrated Farming is automatically allowed.
- h. Cattle production shall be allowed in Integrated Farms only under Intensive Production (feedlot/dairy) BUT shall only be confined to the allocated land parcel.

- i. Dairy farming is not compatible with poultry, piggery or ostrich production because of the high hygienic standards required in dairy farming: the incidence of cross contamination and infections in dairy animals and products can be high if these enterprises are carried out side by side with dairy.
- j. Dairy farming is very compatible with both arable farming and horticultural production: crop residue can be used as dairy feed, dairy feed can be produced /planted side by side with crops for human consumption and manure and waste water from dairy farms can be used for crop/horticultural production.
- k. Dairy farming is also compatible with beef cattle production and smallstock; Dual purpose cattle can be milked. Smallstock are browsers, that is, they feed on trees and shrubs while dairy cattle feed on grass, thus the two species assist in balancing range management.
- l. Table 1 shall serve as a guide to compatible agricultural enterprises.

2.3 Cattle Post Areas

To protect communal grazing areas, fenced farming shall not be allowed in the cattle post areas. Areas to be fenced are those deemed feasible for Commercial Livestock Production, following detailed Fencing Feasibility Studies.

Table 1: Agricultural Land Use Compatibility

Enterprise	Arable Farming	Cattle Production	Small Stock	Horticulture	Poultry	Piggery	Dairy Farming	Fishery	Ostrich
Arable farming			X	X	X	X	X	X	X
Cattle Production			X	X	X	X	X	X	X
Small stock	X	X		X	X	X	X	X	X
Horticulture	X	X	X		X	X	X	X	X
Poultry	X	X	X	X		X		X	
Piggery	X	X	X	X				X	X
Fishery	X	X	X	X	X	X			X
Ostrich	X	X	X	X		X		X	

Key: X=compatible