DEMARCATION OF PROTECTED AGRICULTURAL AREAS

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PLANNING

• Planning involves the process of thinking about and organizing the activities required in a sustainable manner to achieve the desired outcome or goals.

• Spatial planning pertaining to natural resources:
  – What is the potential of the natural resource base - optimal utilization
  – What is the status of the natural resource base
  – Best management practices: Any negative impact on the environment, the economy or on society should be minimized or eliminated.
  – Factors impacting on the natural resource base - positive or negative.
  • The negative impacts have to be minimized, managed or eliminated through proper management processes and interventions

• Planning is an integrative and comprehensive approach in order to rationalize the appropriateness of land use activities, to promote sustainable development (synergy, sustainability, sensible, strategic and supportive) and to ensure sustainable utilization of national resources (limited degradation).

• “No plan is worth the paper it is printed on unless ...................... it starts you doing something”
• **Planning** includes understanding the **dynamics** of the area, its **resources** (and the community requirements) with the ultimate aim of compiling an **intervention plan** for the **improvement** and **sustainable** management of the **natural resource** in accordance with the requirements of the community.

• The FAO (1976) stated that the process of **assessment of land performance** when used for **specified purposes**, involves the execution and interpretation of surveys and studies of **land forms, soils, vegetation, climate and other aspects of land** in order to identify and make a comparison of promising kinds of land use applicable to the objective of the **evaluation**.

• Land evaluation and land use planning evaluation include concepts such as:
  – land management,
  – current land use,
  – adjacent land uses & the impact thereof on agricultural production,
  – the characteristics of the land,
  – land use requirements and
  – the improvement thereof.
PROTECTED AGRICULTURAL AREAS

PURPOSE

• To protect high value agricultural land for the (exclusive) use of food production

• To manage/prohibit the change of land use from agriculture (potential agricultural use) to non-agricultural land uses or to activities that do not contribute constructively to the production of food

• Planning tool
  – Agricultural Sector Plans
  – SDFs; LUMS; etc.

• Preservation and Development of Agricultural Land Bill:
  – Agricultural Areas:
    • “cartographic delineated areas with shared agricultural characteristics, based on the
    • (a) agricultural potential;
    • (b) agricultural capability;
    • (c) agricultural suitability
    • (d) conservation status;
    • (e) use; and
    • (f) geographic location.”

  – Protected Agricultural Areas (PAAs):
    • “cartographic delineated area of agricultural land –
      – (a) preserved for purposes of ensuring high value agricultural land is protected against non-agricultural land uses in order to promote long-term agricultural production and food security;
      – (b) includes all areas demarcated as such;
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CORE PRINCIPLES OF DELINEATION

- Production of food
  - National mandate
  - Production of useful biomass
    - Grains / Horticulture / Viticulture / Planted pastures
- Natural inherent potential (capability)
  - Significant above the norm
- Availability (agriculture dominant land use)
- Assigned rights
- Land use system
  - Commercial
  - Communal
- Concurrent function
  - National Areas – Food production
  - Provincial Areas – Economic contribution; Creation of jobs; best land available; “Trade marks”
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EVALUATION FACTORS

- Complexed environment – not one-size fits all
  - Land capability
  - Crop suitability
  - Land suitability
  - Land use / cover
  - Irrigation
  - Plantations

LAND CAPABILITY

- Land capability evaluation classes 11 – 15
- Land capability evaluation classes 9 - 10
Crop Suitability

• 14 possible crop type classes were classified (informed by the relevant 53 crops) and combined within one crop suitability indication layer that indicates the number of suitable crops per geographic area. Therefore within a specific spatial locality an area had the potential to be suitable for a maximum of 14 different crop types and a minimum of 0.

• It was found that nowhere is South Africa is a locality where all 14 crop types were suitable. The maximum number of crop types suitable for a given area is 12.

• Classes used:
  – 6 – 12
  – < 6

Land Suitability

• Combination of:
  – Land capability
  – Crop Suitability
  – 70/30 ratio
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Irrigated Areas
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Plantations
Indigenous Forests
– Not formally protected as a Protected Area
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Commercial areas vs. Communal areas
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Excluded Areas

- Permanently transformed (Landcover 2013/14)
  - Built up (residential; industrial; commercial)
  - Mining
  - Waterbodies

- Municipal areas prior 1994 (2009 / 2016)
  - Areas not regarded as agricultural land under Sub-division of Agricultural Land Act, 70 of 1970 / PDALB

- Formally proclaimed Protected Areas
  - Areas not available for agricultural production in any format
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Other aspects

- Boundary Alignments
  - Cadastre (parent farms / portions)
  - Rivers
  - Roads
  - Any other visible man-made feature
  - (Catchment boundaries)
- Buffer Areas
- Adjacent land uses
- Areas (size)
  - Not currently specified
- Land uses within - Larger non-fragmented primary agricultural land use
- Cognisance:
  - Future (expansion) of irrigated areas
  - Improved technologies – expansion of agricultural technologies
- Biodiversity Planning requirements
- Norms and Standards per each PAA
Thank You!!!