

DEPARTMENT of AGRICULTURE, FORESTRY and FISHERIES



Bio-fuel

DAFF Position on bio-fuel



- Introduction
- Bio-fuel crop production for S.A
- Challenges
- Opportunities
- Risks
- Way forward

Introduction



- The Department of Agriculture's mission is to lead and support sustainable agriculture and promote rural development through ensuring access to sufficient, safe and nutritious food for the people of South Africa.
- Currently, South Africa experiences food insecurity problems, particularly at household level. Several reasons account for household food insecurity in this country, including negative impact from drought and low productivity due to expensive and un-affordability of production inputs, particularly by the poor. Water limitations due to unreliable and variability of climatic conditions also impact negatively on SA agriculture.

Bio-fuel crop production for S.A



- The use of bio-diesel, and the production thereof, is seen as one way of achieving clean environment.
- It is anticipated that production of bio-diesel will create economic opportunities within the agricultural sector, such as alternative market, agro-processing and other related industries. Elsewhere, production of energy crops occurs where surplus food crops would have been produced. The balance is created by food products still accounting for a better income than energy crop, but the demand for clean environment, thus bio-fuel, determines that areas that would have been unproductive be utilized for the production of energy crops.

Bio-fuel crop production for S.A



- In light of limited arable land and potential household food insecurity problems facing SA, this interim position will clear the way-forward for future utilization of agricultural land resources towards bio-diesel crop production.
- This interim position is also informed by the Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983). The Act makes provision for the control over the utilization of natural agricultural resources of South Africa in order to promote conservation of soil and water, vegetation and the combating of weeds and invader plants and matters connected therewith.

Challenges

- South Africa has limited arable land. Some high-potential agricultural land under-utilized still exists in the former homelands.
- High levels of investment required for infrastructure to generate bio-energy
- Growing demand of bio-fuel vs. Clean environment.
- SA dependency on imported fossil fuel and exposure to high oil prices in times of scarcity



Challenges cont'

- SA produces surplus diesel from fossil fuel. Any additional production from biological sources means that more diesel will be available for export. The dilemma, however, is that at the moment, bio-diesel production is expensive compared to fossil fuel production.



Opportunities



- Production of bio-diesel in SA will minimize dependency on fossil fuel. Farmers will also have wide options in terms of crops and markets.
- Under-utilized and marginal lands could be put into economic production, particularly among small-scale farmers, LRAD beneficiaries and rural communities in the former homelands
- Agri-BEE and small businesses will be enhanced as a result of bio-diesel industry. This is possible throughout the entire chain of crop production, processing and marketing.
-

Opportunities cont.

- If independent sources of fuel lead to relatively cheaper fuel prices, it will enhance farming as a business. This will have a number of positive spin-offs for the agricultural sector, particularly emerging farmers.
- Depending on the type of crops and bio-diesel crop rotation, land degradation as a result of erosion, infestation, and soil fertility decline can be minimized.



Benefit

- Bio-diesel will benefit SA only if linked to surplus crop production. This implies that food crops, if in surplus, can be used for the production of bio-diesel.



Risks

- Where a bio-diesel crop has “limited” use, it is a risk for farmers. For example, if bio-diesel price drops due to any reason, the commodity cannot be used for other alternative needs, such as food.



Recommendations



- The Department of Agriculture recommends the “food first” approaches. This implies that food production must be given first preference, in order to ensure national food security.
- Food first approach can be achieved in many ways, namely:
- ***Intensive production***
- ***Cultivation of under-utilized (non-utilized) high potential land***
- ***Crop rotation and inter-cropping***

Conditions



Zoning

- The Minister of Agriculture, Forestry and Fisheries must endorse any bio-diesel crop production plan that aims to utilize high potential agricultural land. Through zoning, the Minister or an executive officer appointed by the Minister can approve, disapprove and restrict any use of such agricultural and /or virgin land for bio-diesel crop production

Condition cont's



Alien bio-diesel plant species

- Alien species such as Jatropha, if cultivated, must not be grown on agricultural land. Such crops are not encouraged by the Department of Agriculture. The Minister can terminate any practice that, in her or his opinion, poses any threat to food security, compromises the status of natural agricultural resources, and impact on agro-ecosystems.

Condition cont's



Research and piloting

- For research purposes (according to CARA, 1983) alien plant species can be brought into the country or propagated with the aim of better understanding of the species, its characteristics and the potential use, including economic analysis, spin-offs and side effects.

Conclusion

- The Department of Agriculture, Forestry and Fisheries encourages only the use on surplus produce for bio-diesel production. Since the arable land is limited, DoA is promoting food security approach, sustainable natural resource use and management, and the economic viability of the agricultural sector



THANK YOU

