SUMMARY OF THE FSN FORUM DISCUSSION

ENERGY COMPETITION FOR FOOD CROPS FROM 3RD JUNE TO 20TH JUNE 2008

(Proceedings available at http://km.fao.org/fileadmin/user_upload/fsn/docs/PROCEEDINGS_Energy_competition_for_food_crops.doc)

I. ISSUES RAISED

- There is a need to re-look at the following pro-biofuel arguments (E. Elamin):
  - Diverting more agricultural land to bio-fuel could reverse the global demand of agricultural products from being inelastic to elastic. Elastic demand of agricultural product means more demand for progressive decreases in farm product prices that in turns manifested in increased incomes of rural poor and implied poverty reduction for these communities who suffered much from income poverty.
  - Increased bio-fuel should reduce the use of anti-environment energy and clean the environment for healthy life for our future generations; this fact could more than offset the transitory increases in food prices before global food consumption adjusts with bio-fuel technology via reconciliation of reduced consumption by affluent societies (the price of clean environment) and increased transhipment of food to needy people.
  - The needy people mostly concentrated in Africa and the least developed countries should gradually go out of poverty by having more income from diverting more of their farm land to bio-fuel and eventually become rich enough to import food from developed countries.
  - The energy competition for food crops can trigger a save return to traditional-forests, biodiversity and wildlife based food (E. Elamin, E. F. A. Ismail)

II. OPINIONS AND SUGGESTIONS

- New generation biofuels can provide well-off consumers with quality biofuel solutions with the cited benefits; and serve as a path to more sustainable, renewable energy resources. However this would remain only a dream for poor countries (E. F. A. Ismail). Instead of having good impact by land use, cleaning of the environment and improved income, the production of biofuels from food crops have negative impacts:
  - Concerning land use: divert more agricultural land in some areas for cultivating biofuel crops that may raise problems to agricultural sustainability by over use of agricultural inputs and natural resources. The poor will ultimately be out of the utility concept “reverse the global demand of agricultural products from being inelastic to elastic” (A. A. Osman, E. F. A. Ismail)
  - Concerning the environment: producing biofuels have serious environmental costs in terms of deforestation, water use, production of greenhouse gases,… etc (A. A. Osman, E. F. A. Ismail)
  - Concerning food security: reduce the availability of food, especially for poor people (F. M. Ali, A. A. Osman). Poor farmers who lack sufficient financial support to use appropriate technology that increase their yields are not expected to benefit from opportunities made by the price hikes and will see their income lower (E. F. A. Ismail)

- Production of bio-fuels from food crops is not a good solution in the long run but may provide a transition strategy (D. L. Young, E. F. A. Ismail)

- The long run sustainable solution is technology to produce **biofuels from non-food feedstocks** and **incentives for conservation and clean energy** (solar, wind, etc.) (D. L. Young, E. F. A. Ismail)

- Indiscriminate use of biofuels could lead to a number of threats but this should not stop the **progressive replacement of oil with biofuels.** Bioenergy exploitation could provide huge benefits despite of the few (although serious!) drawbacks (A. Flammini)

- There is an urgent need for **sustainability criteria** to be agreed at the international level to prevent bad impact of biofuels (A. Flammini)

- The pros and cons of biofuels depend on the specific features of the countries. In Latin America, especially in Brazil, rural poor communities might have the opportunity to be better off once they are cultivating alternative crops aiming to produce biofuels. There is not any competition between "**food agriculture**" versus "**energy agriculture**" in Brazil in the near future and the risk exists only if biofuels are produced in a non-sustainable way (M. Finco)

- Small scale production of bio-energy in rural areas may reduce the reliance on fuel-wood, which means less pressure on the forest, less burden for women who usually are tasked with collecting fuel-wood and less health risk from fuel-wood smoke (F. M. Ali).

- Besides agricultural bio-fuels which have been criticised heavily for having negative side-effects, **aquatic bio-fuels** represent a good alternative. Micro algae and fish waste can generate a biofuel suitable to run engines in a sustainable manner without major impacts on food security, land use, biodiversity, markets and so on. More details can be found in the recent paper "**Aquatic bio-fuel**" at http://km.fao.org/fsn/resources/fsn_viewresdet.html?r=447 (T. Piccolo).

III. REFERENCES

- **Impact of Climate Change and Bioenergy on Nutrition** (B. Thompson).

http://www.fao.org/ag/agn/agns/files/HLC2_Food_Safety_Bioenergy_Climate_Change.pdf

- **Aquatic bio-fuel** (T. Piccolo).

http://km.fao.org/fsn/resources/fsn_viewresdet.html?r=447

- **Economics of Biofuel Production in the Pacific Northwest**
  http://km.fao.org/fsn/resources/fsn_viewresdet.html?r=448