FOOD & AGRICULTURAL RESEARCH COUNCIL

PRIORITIES (1998/2003) FOR NON-SUGAR SECTOR (For funding support)
(Master Plan)

1. Land Use
   Identification of non-sugar cane, agricultural lands (especially in the Northern plains) and their indexation using lat.est tools (GIS & GPS).

2. Irrigation
   - Definition of water requirements for different crops
   - Evaluation of irrigation systems

3. Mechanisation
   - Identification of appropriate equipment & technology mainly for finer land preparation (required for vegetable production and some fruit species, e.g. pineapple, strawberry, ornamentals)
   - Adaptation of mechanisation system to different crops, and identification of appropriate equipment specifically for food and fruit crops, at different levels of operations, sowing and planting, fertiliser and pesticide applications; weeding and harvesting.

4. Crop Production
   Planting materials (cuttings, seeds, plantlets)

5. Crop Protection
   - Proper experimentation of pesticides under local conditions before registration and use
   - Establishment of spraying schedules including mixtures of compatible chemicals
   - Pesticide residues

6. Post-harvest Technology
   Establishment of procedures of pre-harvest, harvest and postharvest stays on crop by crop basis to minimise waste and losses while enhancing quality: technologies at harvest, cleaning, sorting, packaging, cooling, transport and handling of produce.

7. Biotechnology
   - Priority is to enhance the techno-structure first: physical infrastructure (lab, equipment, etc. and H R D (training, etc.)
   - Workplan on Tissue-Culture/Micropropagation & Evaluation on priority crops using T/C facilities at FARC (use by AREU) and Barkly E.S. (See projects proposed in 2000) and priorities already mentioned in 1998 Report ‘Agricultural Biotech. in Mauritius’ by Israeli Experts used as basis for formaliting work plan & funding priorities.
Animal Production

1. Milk and Beef Production
   - Nutrition: Identification of alternative feed resources and supplements
   - Formulation of complete diets
   - Milk quality: Investigation of low milk fat syndrome
   - Production economics: determination of costs of production

2. Small Ruminants (Goats & Sheep)
   Model goat farm using selected, adapted imported breeds on medium to large-scale production systems

3. Poultry (broilers & layers)
   (i) Animal health & sanitation
   (ii) Use of local substitutes for imported feed ingredients and additives
   (iii) Alternatives to wood-shavings in litter
   (iv) Lighting regimes for layers

4. Venison (deer)
   - Nutrition: Development of optimal pasture systems
   - Feeding systems under intensive feedlot production of deer

5. Pig Production
   - Nutrition: Feeding development of systems to improve carcass quality
   - Development of grading and pricing schemes with premium on quality

Food and Agricultural Production Systems

1. Intensive Production / Soilless & Protected cultivation systems (Hydroponics, etc.)
   - Technology transfer: Adaptation of hydroponics technologies to local conditions and development and evaluation of lower cost system.

2. Organic Farming
   - Technology transfer: Definition of guidelines and requirements for different crops and farm animals.

3. Agro Processing
   - Capacity building
   - Food and fruit processing at level of cottage industries
   - Survey of agro-processing activities