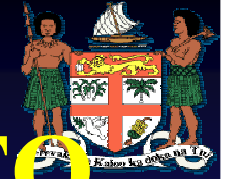


SMALL ISLAND DEVELOPING STATES in the PACIFIC– FIJI CASE

Strategic Approach to the Improvement of
Agricultural Productivity towards Food Security in
the Pacific

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Land and Water Resource Management
Ministry of Primary Industries and Sugar
REPUBLIC OF FIJI ISLANDS

2/20/2009

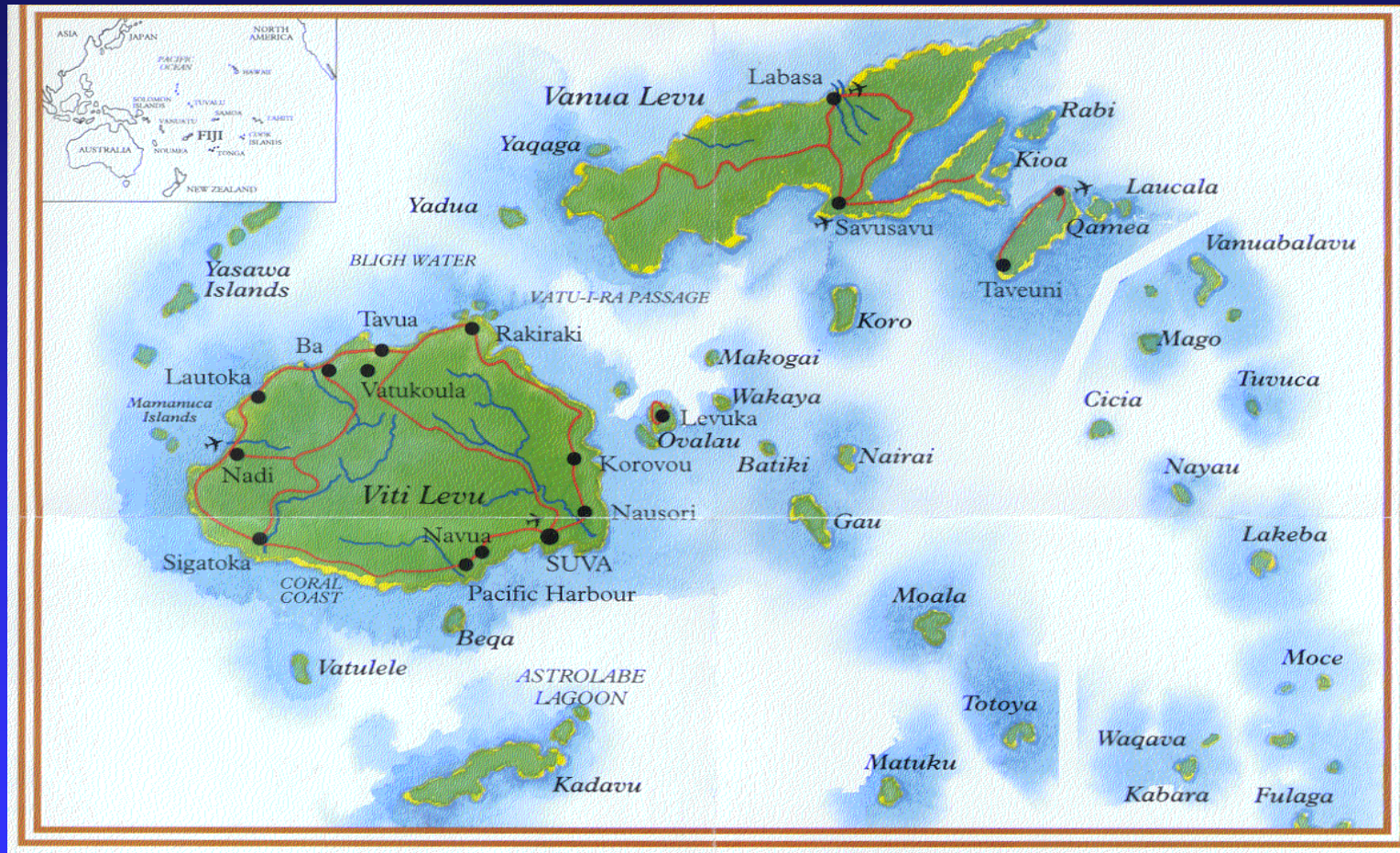


VULNERABILITY ISSUES TO ISLAND NATIONS

- Climatic changes
- Sea level rise
- High cost of production
- Rising food costs
- Self reliant on food security
- **Fiji Islands is no exception**



Republic of Fiji Islands





OVERVIEW - FIJI

- Fiji Island – situated in the South Western Pacific Ocean
- Comprise of over 300 island, of which only 109 islands are inhabited.
- Two main islands – Viti Levu & Vanua Levu supporting majority of the population.
- Islands are predominantly volcanic and rise to an elevation of around 1,000m above sea-level
- Only 16% of the land is suitable for Agriculture
- Windward side predominantly covered with rainforest while the leeward side extensively cultivated with sugarcane
- Total land area is 18,272km² dispersed in the territorial waters of around 141,800km²
- Fiji has two marked seasonal climatic conditions (hot-wet & cool-dry)
- Average rainfall ranges from 1,500mm to 4,000mm annually
- 80% rainfall recorded in the windward side, while leeward side receives 20% of the rainfall.
- Agriculture had been the backbone of the economy for the last 5 decades, and its contribution to the national GDP has declined from 20% to around 12% over the past decade.



ECONOMIC OUTLOOK

■ OVERALL

- ◆ 2008 growth— 1.2%
- ◆ 2009 forecast- 2.4%

■ AGRICULTURE SECTOR

- ◆ 2008 growth – 1.2%
- ◆ 2009 forecast – 4.6%



INFLATION

- 2008 up to September – 9.8%(highest in 20 year period)
- Increase mainly driven by higher food and oil prices- energy prices rising all time high of over US\$140 per barrel
- Fiji's energy import bill accounted for 37% of the total import for 2008
- In 2009, likely to ease with a reversal trend in oil prices



AGRICULTURAL SECTOR

- In 2007, agriculture contributed only 12% towards the country's GDP
- Food imports increased from F\$225m in 2000 to F\$394m in 2007
- Low productivity reflects on many factors
 - ◆ Small subsistence farming
 - ◆ Low level of mechanization
 - ◆ Inadequate inputs and high costs
 - ◆ Inadequate infrastructure
 - ◆ Land tenure insecurities



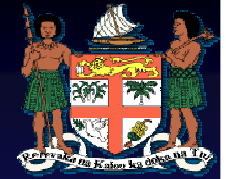
ENERGY SECTOR

- 50% of the population have access to power supply
- Total energy available from Fiji Electricity Authority - 767gwh
- 65% from hydro, 21% from diesel, 13% from HFO (heavy fuel oil) and 1% from wind and solar
- Prices - \$1.65(2007) to \$2.28(2008) per litre
- Investment on bio fuel now emerging



PROBLEMS and ISSUES

- Geographical location- high cost to procure goods and services
- Climate change- land degradation, coastal erosion,
- Sea level rise – 51cm by 2100(coastal inundation)
- High risk of health epidemics- dengue and diarrhoea
- Low level of reliance on local production- food importation increased from 2001 to 2007 by 175%
- Technology adoption rate very low



LAND DEGRADATION



2/20/2009



SEA LEVEL RISE IMPACTS





APPROACHES TO REVILIZE AGRICULTURAL SECTOR

- Increased investment in infrastructure
- Resolving land tenure problems
- Introducing appropriate and affordable agricultural machineries and equipment
- Incentives on agricultural developments
- Commercializing agriculture
- Strengthening international market
- Training and capacity building



INVESTMENT IN INFRASTRUCTURES

- Protection of low lying productive land from impacts of sea level rise – seawalls and drainage discharge
- Construction flood protection structures – river bank protection, river training & flood retention dams
- Emplacement of drought mitigation measures-irrigation projects
- Tap on renewable sources of energy – windmills



INFRASTRUCTURE DEVELOPMENT





INCENTIVES IN COMMERCIALIZING AGRICULTURAL DEVELOPMENT

- 10 years tax holiday for agricultural farming and agro processing in rural areas
- 200% tax reduction on import of agricultural machinery and equipment
- tax exemption on agricultural commodities with maximum turn over threshold of \$300,000



TECHNOLOGY ADOPTION

- Introduction of agricultural engineering and mechanization programs at local tertiary institutions
- Increasing adaptive research technology at farm level
- Research and development on affordable and appropriate technology
- Focus on agro-processing for food and energy production



MECHANIZATION





MECHANIZATION

- No policy framework
- Low level of research and development
- Low funding priority
- No importation standard
- Appropriateness and affordability a major issue



CONCLUSION

- Improvement of agricultural productivity for food security requires multi dimensional approaches such as;
 - ◆ Review of drainage criteria in low lying area to address sea level rise
 - ◆ Perusal of renewable energy to off set imported fuel hike
 - ◆ Identification & introduction of affordable and appropriate technology
 - ◆ Construction of infrastructures to reduce impact of extreme climatic conditions



THANK YOU

2/20/2009