

SAMOA

Capital:	Apia
Land Area (km²)	2,934
Sea Area/EEZ (km²)	120,000
Islands (No.)	9 (4 are inhabited)
Population (No.)	169,200
Annual Growth (%)	0.6
Density (inhabitants/km²)	58
Rural Population (% of total population)	79
GDP (US\$ million)	175.9 (1996)
Agricultural GDP (% of total GDP)	19
GDP per caput (US\$)	1,066 (1996)
Currency:	Tala

A. General

Samoa consists of two dormant volcanic islands together with a few smaller adjacent islands, whose total land area is just below 3,000 km². Barrier reefs enclosing narrow lagoons encircle much of the coastline except for the north coast of Upolu, the main island, where there is an extensive shelf area which extends up to about 20 km offshore. The country is vulnerable to devastating storms.

Agriculture employs two-thirds of the labour force, and furnishes 90% of exports, featuring coconut cream, coconut oil, and copra, lately also fish. The manufacturing sector mainly processes agricultural products. Tourism is an expanding sector, accounting for 15% of GDP; about 85,000 tourists visited the islands in 2000.

B. The Agricultural Sector

Agriculture, forestry and fishing generated about 19% of GDP in 1998. The principal cash crops are coconut (which, in its various form, accounted for 54% of domestic export earnings in 1997) and taro (also the country's primary staple food). Sales of taro provided 58% of all domestic earnings in 1993, but an outbreak of taro leaf blight devastated the crop in 1994 and reduced exports to almost nil in that year and subsequently. A campaign to revive the taro industry was launched in mid-2000. Breadfruit, yams, maize, passion fruit and mangoes are cultivated as food crops. Pigs, cattle, poultry and goats are raised, mainly for local consumption.

Samoa's forest area comprises almost 40% of the total land area. Substantial areas are under coconut, and smaller areas of mangroves are also present. The export of unprocessed logs has been banned. The country produces sawnwood for its domestic market. Small quantities of timber are also exported.

There are no freshwater bodies of any significance and thus no important inland fisheries, although a number of aquaculture projects are under way. Marine fisheries are predominant, but due to the proximity of neighbouring countries Samoa's EEZ does not extend to 200 nautical miles offshore in any direction, and at 120,000 km² the EEZ area is the smallest in the Pacific Islands region.

Strategic Options, Opportunities and Constraints. The most challenging food security issues for Samoa towards 2010 are sustaining domestic food production levels in line with food demands (import substitution) and market potentials, increasing the productivity and returns to subsistence and commercial agriculture (diversification and intensification), the improvement of the marketing structure, the rising volume and prices of poor quality and nutritionally inferior food imports, and increasingly, the existence of environmental degradation associated with poor land management practices (deforestation, soil and water degradation, and encroachment onto marginal uplands and ecologically vulnerable marine ecosystems). These resource management issues involve many Government agencies, private companies and communities, and could be addressed by implementing an integrated approach to land and natural resource management.

The Government has identified the following key constraints in the agriculture sector (i) absence of a coherent national agricultural and sub-sectoral policy and strategy; (ii) inadequate resource allocation; (iii) institutional constraints in agricultural governance (weak technology, statistics, information and management systems); (iv) direct Government interventions in agricultural trade and competition with private sector; (v) regulatory barriers to private sector participation and investment; (vi) lack of formal security of tenure arrangements on customary lands; (vii) weak land use planning capability and lack of an enabling institutional structure that promotes an integrated approach to land and natural resources management; (viii) limited participation (and interest) by resource owners/users in policy and decision making processes; (ix) inadequate levels of human resource development; (x) under-development and under-supported informal sector opportunities; (xi) low levels of agricultural product and market diversification and investment in agri-business support systems (post-harvest technology, agro-processing, information); (xii) slow growth and progress of finance markets (rural credit and savings mobilisation); and (xiii) poor market information dissemination.

There has also developed a tendency to downplay the significance of those constraints over which the country has really no control, such as that relative geographic isolation, heavy costs of shipping and transport, limited internal market, lack of all forms of resources except some limited fishing, land and forests and acute shortages of trained manpower. Migration may have aggravated the manpower shortage but it has not caused it.

In approaching 2010, a diverse, semi-subsistence village agriculture is key to maintaining equitable livelihood security. Scope exists for raising the level of productive efficiency of the traditional farming system and in adopting innovative food production technologies (e.g. agro-forestry) that are efficient and sustainable ecologically, and which would not sacrifice household food security. Policy reforms to boost commercial agricultural development should focus on the diversification of the agricultural base through private sector initiatives, on the development of processed products and on the diversification of markets.

Food security, nutrition and poverty alleviation targets for the Year 2010 are to eliminate severe protein-energy malnutrition and consequent health problems such as diabetes, hypertension, obesity and heart disease or even infant and maternal mortality rates

The national priority for forestry is a long-term effort towards reforestation through community and plantation forestry. Conservation farming and agro-forestry and watershed rehabilitation programmes are also high priorities. The first commercial sawlog production from this resource is not expected before 2006.

Samoa has a good potential growth rate that would triple its level of beef production by 2010. The country has also a significant potential for milk production particularly in the upland areas.

Because of their role in providing high-quality protein for local consumption, subsistence fisheries can be regarded as equally challenging. Although increasing the production of export fish (particularly tuna) may be a desirable and realistic goal, a concurrent and more crucial goal must be to prevent a further decline in the near-shore fisheries by encouraging coastal villages to develop their own conservation and fisheries management plans.

C. Project Interventions: Income Generation Activities

I. Chicken Production in a Permaculture Farming System

Traditional free-range, backyard chicken production results in heavy losses (eaten by dogs and pigs) and low production of eggs and chicken meat. Rural communities are spending increasing amounts of money on low quality, imported food products (mutton flaps, turkey tails, etc). The reduction in import taxes, as a result of Samoa's tariff reform programme in preparation for the WTO accession, has led to a huge increase in imported food products. Many of these have low nutritional value and pose health risks to Samoans who are increasing their consumption of high sugar, high fat foods.

The aim of this project is to encourage rural communities to refocus on producing traditional foods. Raising chickens with a permaculture farming system is one way of doing this. It is also anticipated that this will be an organic production system and the resulting surplus products for sale will achieve higher prices from health conscious consumers, and from the popular backyard/free-range chicken flavour most sought for by consumers.

Design of Units will focus on utilisation of locally available materials with very little procurement of inputs where possible.

Local Contribution include: personnel for research units, inclusive of local materials used; land site for research unit activities; maintenance of research site after 2 years; sustainable costs of evaluation, operation, planting material nursery and labour; and advisory services.

Success Indicators

- More efficient production with fenced in poultry, less egg and chick loss to preying dogs and pigs, allowing for increase in output, nutrition and income;

- Ease in duplication by low income families with the maximum use of locally available resources;
- Increase rural employment and income generation;
- Expected market response to fresh high quality, organic poultry products and can be expanded to export markets in the future; and
- Import substitution to higher quality local meat products;

II. Agricultural Produce Processing – Value Adding

Samoa is prone to natural disasters (cyclones 1990 and 1991, Taro Leaf Blight and Giant African Snail) all of which have drastic effects on food security. Not only this, its accession to the WTO and the trade reforms puts it in a more competitive situation with imports, and the lower income rural communities are most affected. Stringent sanitary and phyto-sanitary (SPS) measures by importing countries, has made exports from Samoa more difficult as well. It is thus essential that Samoa seriously look at down stream processing of its agricultural produce to ensure: Storage capacity of processed food stuff for longer storage and access to food ; ability to prolong shelf life for goods that ensures marketable commodities to the consumers and in turn ensure disposal of agricultural goods for the rural farming communities; ability to sustain export potential of agricultural commodities for farm produce disposal and SPS measures under the WTO rules; and enable a competitive edge for farm produce marketing and ensure income-earning capacity to the rural farming communities.

The project proposes simple, yet codex compliant, agro-processing equipment that can be readily made available to small business enterprises. The priority agricultural commodities are:

- Papaya (HTFA facility for exports expects at least 35% rejects that could pose some constraints to small farmers for disposal) – Processing into pulp – income generation and nutrition;
- Breadfruit (also HTFA sanitary facility for export) but also for storage life, a good source for food security and income generation.
- Perfume extraction – Samoa has a lot of colourful flowers that can be extracted for perfume use, a possible component involving Women in Business.
- Forestry – Centre for Value Added Timber (rubber tree wood, coconut wood, etc).
- Bee keeping – processing into bottled honey, wax processing, queen bee breeding.

A good example of the success of such an approach is the processing of coconut oil into cosmetics and cooking oil by Small Businesses under the Women in Business programs.

Success Indicators

- Ensure disposal of HTFA commodity rejects, eliminating excess loss especially to small farmers;
- Ensure market disposal and income generation;
- Ensure employment in the rural communities;
- Enable small farmer (and foresters) participation in export markets; and
- Reduce food insecurity within the rural communities