

SOLOMON ISLANDS

Capital:	Honiara
Land Area (km²)	28,000
Sea Area/EEZ (million km²)	1.6
Islands (No.)	6 large and many small islands
Population (No.)	447,900 (2000)
Annual Growth (%)	3.4
Density (inhabitants/km²)	16
Rural Population (% of total population)	87
GDP (US\$ million)	286.4 (1993)
Agricultural GDP (% of total GDP)	40
GDP per caput (US\$)	882 (1993)
Currency:	Solomon Islands Dollar

A. General

More than 380,000 people live in more than 5,000 villages, seven townships and one town (the capital, Honiara) over a land area of 27,000 km² scattered over six major islands and many smaller ones. The main islands are mountainous and covered with tropical rain forest. There are extensive reefs and lagoons. The climate is equatorial but tempered by the surrounding ocean. The mean annual temperature in the capital Honiara is 27°C. There are no clearly defined seasons but between November and April, the weather is more uncertain and cyclones form, which can cause extensive damage, especially to food crops. Rainfall is often heavy reaching 8,000 mm per year, but generally averaging 3,000-3,500 mm.

There are three main ethnic groups, the Melanesians, accounting for about 94% of the total population, and the Polynesians and Micronesians accounting for 5%. At least 87 vernacular languages are spoken in the various islands. About 85 per cent of the population live in the rural areas, where the lifestyle is still based on subsistence food production and fishing. The essence of social identity is the relationship with one's relatives in the extended family or "won-tok" (literally one-talk).

The economy of the Solomon Islands is characterised by a dualism, which originates from the country's past. There is a large under-capitalised rural sector, linked only by smallholder production of copra and cocoa to the commercial export sector, where fishing and logging account to 80% of the economic output. The economic growth averaged 4 per cent annually over the past decade, based on increased outputs from fisheries, forestry and agriculture, financed almost entirely by foreign capital.

Adverse weather conditions and cyclones in addition to world price fluctuations make primary sector export commodities such as copra, cocoa, palm oil, wood products and fish highly vulnerable. Several factors including poor transportation, the narrow economic base, and limited physical infrastructure contribute to the difficulty of developing a self-reliant economy. The country is still mainly a primary producer, with little processing capability. The shortage of trained human resources is also a fundamental constraint.

There are disparities in access to resources, services, income and education. The areas with the greatest resources attract the largest share of national investment, and also the largest share of migrants. Sound regional and sectoral allocation and resource management are required to prevent the deepening of such disparities.

There are clear indications that poverty has been exacerbated by the long running law and order problems, the on-going financial crisis, the contraction of economic activities and rising unemployment, compounded by high population rates. Almost all development work has ceased because of the on-going civil disturbance.

B. The Agricultural Sector: Constraints and Strategic Options

Agriculture and the Economy. The primary sector accounts for 42% of GDP in 1995 (agriculture, 18%; forestry, 11%; and fisheries, 13%) and 97% of total exports. Agriculture consists of three sub-sectors (a) subsistence small holder farming sub-sector; (b) large-scale commercial sub-sector consisting of corporate agri-business companies which operate on alienated and registered land; and (c) the intermediate communal sub-sector which comprises communally-owned agricultural enterprises. Most of the population (85%) live in rural areas, and are supported by subsistence agriculture. The subsistence smallholders farming include growing root crops, indigenous vegetables and tropical fruits, raising livestock and inshore fishing.

The livestock sub-sector consists of local inbred pigs and chickens which are integral part of traditional agricultural systems as well as commercial ventures involving cattle raising, broilers and layers as well as hogs which have developed with varied success, but on a relatively small to medium scale. Given the robust demand for both fresh and processed meat, potential for import substitution is an important issue for the sub-sector.

Close to 90% of the total land area are classified as forest and woodland (2.45 million hectares) but only 254,000 hectares are considered as commercially exploitable because of poor accessibility. Recent natural forest inventory preliminarily indicates the availability of 13 million cubic meters (m³) of standing commercial timber, which at current unsustainable levels, improving logging practices and pursuing reforestation are critical policy issues.

Fish is a major component of the protein diet of the people of Solomon Islands with per capita consumption of around 36 kilograms per year in 1995. About 17% of all households integrated into the cash economy sell coastal fishery products. The value of subsistence fisheries was equivalent to almost US\$16 million or 60% of the value of canned fish exports (US\$26 million in 1995). The commercial fisheries sector is dominated by tuna fishing (both onshore and foreign-owned fishing operations). Sustainable tuna yield is estimated at 120,000 metric tons or almost three times the current level of exportation (42,682 tonnes in 1995). More than SBD 16 million are generated annually from fishing licence fees and transshipment fees.

Land Use, Farming Systems and Institutions. The main cash cropping activities can be divided into plantation and smallholder estates. Plantation estates are either owned by overseas companies, community groups, or individual entrepreneurs, producing a wide range of cash crops, including copra, cocoa, fruits and vegetables. In most farming communities the major staples are sweet potato, cassava, yams, dry land taro, and a wide range of fruits and leafy vegetables. The farming system that is commonly practised in food production is the

swidden system. The fallow period that is an important component of this system has been markedly reduced, leading to a gradual decline in soil fertility. As in many Pacific Island countries, household food production has become of secondary importance to commercial food production. Inevitably with cash crops having a higher priority, health (including nutrition) and living standards are affected.

At least 95% of land is communally owned. Land is considered as perpetual source of sustenance rather than a tradable commodity or resource. A large portion of the customary land resources is unutilised because of land tenure problems. Land disputes over ownership of customary land, rather than land availability, are an obstacle to the development of rural areas in Solomon Islands. In some areas there has been a general shift in cash cropping activities from traditional cash crops, notably tubers like taro and sweet potatoes to traditional fruits and vegetables for the urban market.

The livestock industry in the country is very limited and presently a proportion of the beef supply is imported from Vanuatu. There is a small animal industry in the rural areas, with farming of pigs, poultry, goats and bees for honey. Some households raise chickens and pigs as a household food source or for sale within their home garden system.

Irrigation is undeveloped in Solomon Islands. Irrigation development is now being pursued as more intensive commercial crop production becomes necessary for food security and export purposes. A pilot project to reintroduce rice farming and irrigated food and cash crops is underway. Irrigation and farm mechanisation technology may gradually evolve through investment in adaptive research and in response to market opportunities.

Major Challenges and Constraints. A major dilemma facing the nation at the present time is the law and order problems besetting the whole country and the yet unclear picture of when these problems may end. Under those conditions, only limited assistance can be planned. Increasing the productivity and income of traditional subsistence and commercial smallholder, communal and corporate plantation agriculture and improving its potentials for diversification and modernisation within the framework of population and unemployment pressures, wanton destruction of forest resources, land tenure insecurity and vulnerability to disasters, constitute the most important challenges to the development of rural economy of Solomon Islands. By 2010, Solomon Islands' population will increase to 563,000 people (medium variant estimates) with a potential labour force of more than 255,200 people. Unless the Government succeeds in implementing responsive education, health and population policies, the pressure on food security and sustainable livelihood will rest on the agricultural sector. Furthermore, deforestation, watershed mismanagement, unsuitable agricultural practices, soil degradation, accelerated commercial development and encroachment on ecologically vulnerable areas, all need to be addressed.

The Government has identified a number of key constraints and challenges including:

- Shortage of experienced and qualified staff at all levels of Government and private sector.
- Disputes over the ownership of customary lands coupled with lack of security of tenure on, and non-commercialisation of, customary lands.

- Lack of integrated and holistic food security, health and nutrition policy and action plans.
- Inadequate resource allocation to the primary sector to fulfil its strategic role as provider of food, fodder and fuel, employment, foreign exchange and suitable environment for human life. The share of public resources to the MAF has been limited to 2-3% of the national budget during the last 10 years.
- Direct Government involvement, interventions and competition with private sector in agricultural trade (factor and product market) as well as constraining regulatory barriers to private sector participation and investment, resulting in waning investors' confidence in the economy.
- Lack of comprehensive water resources development and irrigation policy coupled with vulnerability of fresh water resources to wasteful use, unsustainable farming practices, degradation and pollution.
- Lack of sustainable management of natural resources (forest, fisheries) and land use planning policy covering all types of lands.
- Low productivity, non-remunerative employment and limited diversification of subsistence production system resulting in limited dynamism and intensification of the agricultural sector.
- Limited product and market diversification and investments in crops, livestock, fisheries and forestry production, as well as in agro-industries and agribusiness sectors (transport, post-harvest, processing, communications).
- Slow development in the rural financial market particularly in improving access to rural credit, savings mobilisation and development of new financial instruments and capital markets to encourage agricultural and agro-industrial investments.
- Lack of sound agro-industrial policies and inadequate advisory services to entrepreneurs in the food industry sector.
- Limited market and costly transport infrastructures due to widely dispersed population in outer islands.

Strategic Options. The search for food security and sustainable modern agriculture in Solomon Islands depends on responsive policies, correct price signals, and harmonious relationship amongst the Government, the private sector and the farming and fishing communities. A policy-led and freer market strategy will focus on the removal of policy constraints, uncertainties and inconsistencies and market failures as well, so that economic reforms and sustainable agricultural growth can occur and restore investors' confidence. Quick yielding actions are essential for addressing food insecurity and nutrition concerns (particularly the serious income inequality and unemployment) and laying the foundation for sustained long term growth and development of the agricultural sector.

The agriculture sector of Solomon Islands requires an investor-friendly policy environment, public sector investment, (particularly in technology, infrastructure and information systems) and a field-action programme aimed at mobilising existing institutions and resources towards more efficient delivery of technology and support services to the farming, forestry and fishery sectors. The SIG needs to intensify its collective efforts and partnership with the private sector towards products (processed woods, fish and foods, potatoes, fruits, traditional and organic foods) and market diversification (e.g. seasonal comparative advantage and ethnic markets) in ways that will be competitive with the open and deregulated markets of Australia, New Zealand, Fiji, New Caledonia and other Pacific island countries, North America and dynamic Asian economies.

SIG should continue to implement sustainable policies for generating higher returns from their natural capital in fishery and forestry resources. Both sub-sectors offer the greatest potential for sustainable growth and diversification. The code of conduct for logging will ensure that logging and reforestation practices comply with international standards. Sustainable and community-based fishery resources management and the rationalisation of the tuna fishing industry will boost its contribution to food security, employment and sustainable growth of the economy.

As a small country, Solomon Islands suffers from the vagaries of severe price fluctuations, generally long term structural decline in commodity prices and global competition for its principal export commodities (copra, cocoa, palm oil and kernel). The country requires flexible coping mechanisms, namely: (a) dramatically improve the levels of production and marketing efficiency to achieve comparative advantage in agriculture and ensure high profitability and returns to labour; (b) develop value adding upstream processing of its export crops (e.g. coconut oil and cream, chocolate and confectioneries for cocoa, processed wood, fish and food products); and (c) further improve supporting infrastructure and diversity both the production and marketing systems to provide farmers with greater flexibility to respond to price signals. In the pursuit of such strategies, the SIG has to address the wide disparities in levels of agricultural and infrastructure development, in market access, investment, income and employment opportunities between Honiara and the outer islands of the country. A food security and nutritional surveillance and information system, an updated legislation on food quality and safety, and social safety nets for food insecure groups (feeding and employment schemes) are also essential to effectively address food insecurity and malnutrition issues in Solomon Islands.

The development strategy focuses on the intensification and diversification of the subsistence customary production system with special emphasis on increasing the levels of productivity and returns to labour. The communal, plantation and commercial agricultural sector will be supported through liberalisation of trade policies, stringent food quality and safety measures, development or creation of markets and modernisation of technology, post-harvest, sanitary and phyto-sanitary measures and processing systems. The growth in the agricultural sector will result from favourable macroeconomic fundamentals and sectoral policies, and producers' response to price signals for specific crops, livestock (particularly cattle, pigs and poultry), forestry or fishery commodity. The country can develop relative comparative advantage based on market signals and new niche market (seasonal or ethnic) opportunities which will dictate shifts in output composition, area expansion and demand for productivity improvements.

Public investments are needed in rural infrastructure (roads, small ports, transport, communications, market facilities), technology development and transfer schemes. This calls for strengthening the research, extension and farmers' training and other support (e.g. access to investment information, credit, market). Public investment is also needed to improve the capacity of MAF in policy analysis, statistics and computerised databases, programme and project formulation, benefit/cost analysis, input and output monitoring and evaluations. Based on bottom-up planning and participatory analysis of existing subsistence and commercially oriented farming systems, specific constraints, opportunities, options and related risks and adversities will be identified and considered in the formulation of sustainable food security, agricultural development and natural resources management.

C. Project Interventions: Income Generation Activities

There are law and order problems existing in the country although it has been recently reported that the rural areas are peaceful. Given the volatility of the situation, the Project Co-ordinator (in liaison with the RPSC) needs to periodically gauge the situation together with the local Ministry of Agriculture and plan in detail implementation / holding or termination of country activities.

I. Development of Food Processing

There is very little food processing in the country at the moment. Hence food crops tend to be wasted or must be consumed immediately to avoid going bad. Since most of the food crops grown are perishable or have short storage life in their raw or cooked forms, when there is a natural calamity, shortage of food is usually experienced. By processing root crops and fruits that can be stored for use in times of disasters this will help alleviate people going hungry. Fruits are often going wasted and if they can be made into juices and jams will conserve a lot of foreign exchange and consume over long period. This can also encourage exports and create employment.

The project will promote and encourage food processing among primary producers of food crops and private sector in the country by setting up food a processing unit that will facilitate trials and training on various aspects of food processing in the country.

Success Indicators

- Availability of planting stock to farmers
- Increased production of good quality fruits for local consumption and export
- Increased income earning capacity of farmers
- Creation of employment both at the rural and urban areas
- Foreign exchange earned through exports
- Improved nutrition of population through increased consumption of fruits

II. Development of Seed Gardens

Since the destruction of the National Seed Garden during the recent ethnic tension, the country is yet to have a replacement. However, lack of funds within the Government system has prevented the re-establishment of the old seed garden. While a number of smaller seed gardens have been established on Rural Training Centres and Field experiment Stations in the Provinces, these have not fully developed and are far from being able to meet the needs of farmers in those Provinces.

Provincial seed gardens help alleviate logistic difficulties often encounter in the movement of planting materials in a country made up of many islands like the Solomon Islands. Prior to the ethnic tension nearly all planting-material produced through propagation techniques have to come from the National Seed Garden.

With rehabilitation, development and expansion of agricultural industries (cocoa, coconuts, fruit trees, vanilla, onion etc.), that might require importation of improved planting materials, the need to re-establish the National Seed Garden is imminent. Obviously material such as cocoa or fruit trees that are imported from overseas, apart from having to fulfil

Quarantine requirements, are then field-tested and multiplied before they are distributed to growers. However any further multiplications of planting materials could then be carried out at Provincial Seed Gardens. Thus it is equally important that 2 or 3 other seed gardens should be established at Provincial level.

Soil and Climatic conditions of the National Seed Garden would be far from representing those of the other islands in the country. For this reason, any planting materials that come out of the National Seed Garden may not necessarily do as well under condition prevalent in other Provinces and they must be field-tested under these various environment conditions.

The seed gardens to be established will ensure post quarantine observations, field-testing and rapid multiplication of planting materials. They will also help cut costs of plant material movement between islands as well as ensuring proper screening and selection of planting materials based on soil types and environment factors. Therefore the aim and objective of this project is to set up seed gardens both at National and Provincial level in order to facilitate importation, quarantine, multiplication and distribution to growers throughout the country.

Success Indicators

- Production and availability of improved planting materials to growers;
- Wider distribution of planting materials via Provincial Seed Gardens;
- Support for Post-Quarantine when necessary;
- Facility for field-testing of exotic plant materials
- Employment of local people;
- Support for Extension Services in Provinces.

III. Development of Pineapple Production and Export

Pineapple is by far the only fruit commodity that is not affected by insect pests in Solomon Islands. It is therefore possible that Solomon Islands can export pineapple if other Quarantine requirements (especially those of importing country) can be met. This project aims at ensuring that the commodity is produced in an orderly fashion, meet quality requirements and for the purpose of export, meet Quarantine requirements.

Local contributions include land for building, storage of material, supplies and equipment, provision of raw material, and maintenance costs.

Success Indicators

- Improved food security
- Increased employment and income generation
- Conserve foreign exchange through import substitution