

# **FIJI REPORT TO THE CSD 18/19 SESSION**

- 1. CHEMICALS**
- 2. MINING**
- 3. TEN YEAR FRAMEWORK OF PROGRAMMES  
ON SUSTAINABLE CONSUMPTION AND  
PRODUCTION PATTERNS**
- 4. TRANSPORT**
- 5. WASTE MANAGEMENT**

## **1.0 INTRODUCTION**

Sustainable development is a pattern of resource use that aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but also for future generations. The United Nations 2005 World Summit Outcome Document refers to the "interdependent and mutually reinforcing pillars" of sustainable development as economic development, social development, and environmental protection.

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## **2.0 CHEMICALS**

storage disposal are written in 3 languages in English, Hindi, and Fijian with FAO colour band & pictogram.

***Information exchange and corporation:*** FAO code of conduct on distribution and use of chemical are also distributed by International agencies like FAO, National Agriculture Research Institute (NARI), Greenpeace, Sout

## **2.4 Constraints - Research, Development and Monitoring**

The technical infrastructure for POPs monitoring and research in Fiji is very limited. The



## **3.0 MINING**

### **3.1 Summary - Mining**

Mining and exploration in Fiji has been dominated by gold production from Vatukoula mine in the past, although significant other sector revenues come from industrial minerals such as sand and gravel, quarried stone and coral sand.

The mining and quarrying sector on average accounts for 1.4% of GDP. A sluggish performance in 2005 saw the sector decline by 30.7%, and its contribution to GDP falling to 1%. Prospects for the sector looked bleak when operations at Emperor Gold Mine (EGM) in Vatukoula was shut down in early 2006 to allow a reorganisation aimed at bringing the mine back into profitability. While the shut down was supposed to be temporary, a management decision was taken in December 2006 to close the mine, citing the inability to generate viable returns as th



Guidelines, a set of international offshore mineral guidelines that was developed ten years ago during an Offshore Mineral Policy Workshop that was coordinated by South Pacific Applied Geoscience Commission (SOPAC) and held in Madang, PNG.

3. To date, MRD have issued 7 petroleum exploration licenses. Interests in Petroleum have been boosted by a report titled “Petroleum Potential In Fiji” which was written in 1993 by a Jonathan Rodd whilst engaged as Petroleum Coordinator for SOPAC, which is based in Fiji. In brief, the report indicated the existence of geological structures in Fiji with a high probability that these geological structures are oil-bearing.

### **Fiscal policies for investments and counteracting market fluctuations**

As part of our current Government’s vision for Sustainable Economic Growth, MRD endeavours to vigorously promote Fiji’s Mineral Policy, with its primary aim being to provide potential investors with a clear, stable and transparent guide to investing in Fiji’s mineral sector. The production of the Mineral Policy statement was encouraged by the Ministry of Commerce, Trade, Industry and Public Enterprise, which, in 1996, produced Fiji’s first general Investment Policy Statement (IPS).

Fiji takes the position that the major inducement to attracting mineral sector investors is the opportunity to obtain a return on investment commensurate with the risks faced. In developing the fiscal framework, the Government has sought to create an internationally competitive package of interrelated measures, which achieves the dual goals of investment promotion and equitable returns to the people of Fiji under a variety of market circumstances.

Additionally, Government also accepts that mining is an unusually high risk industry and private investment tends to be attracted to those areas with good geological potential, transparent fiscal policies and political stability. Hence the development of the competitive and transparent Fiscal Policy that will enable investors to achieve returns, taking into account the risks that their investment faces.

Fiscal/tax concessions are subject to approval by the Minister for Finance based on individual case-by-case basis

which will reduce pollution levels in the most cost effective manner, subject to Government approval.

All Prospecting Licences and Mining Leases are subject to established reporting requirements and regular on-site inspection which is undertaken by MRD's Mines Inspectorate officers. This is to ensure all activities undertaken are in adherence to statutory requirements as specified in the relevant Act(s).

As stipulated in the Exploration and Mining Policy, extensions to Prospecting Licenses

operation, mine management is urged to consider establishing resident liaison committees to facilitate information exchange and to provide residents with a forum for airing their views.

The Housing, Social & Regional Impacts Policies further clarifies the importance of land-owners/public consultation and participation in decision-making related to mining projects.

### **Public governance and transparency in the mining sector**

Fiji's exploration and mining administration system is open and unbiased. The guiding principle is that exploration and mining rights are given to any candidate, who by merit, can show Government that they have the capability to carry out an agreed upon work programme. In the case of multiple applicants for a tenement, rights are allocated to the first qualified applicant. This system supports and protects the rights of all investors, both local and foreign, to prospect, explore and mine their mineral discoveries. Investors rights to mineral tenements, and their security of title are enshrined in Fiji's Mining Act and Regulations (Cap. 146).

### **3.3 Mining Best Practices**

#### **Environmental Impact Assessment (EIA) and monitoring of all phases of mining operation (exploration, project development, mine operation and mine closure)**

The Environment Management Act (2005), administered by the Fiji Environment Department, classifies mining projects/operations as “significant waste dischargers”. Therefore, for any new mining project proposal (including exploration), an EIA study needs to be undertaken with an Environment Management Plan (EMP) formulated to mitigate environmental issues highlighted in the EIA report. All costs are borne by the mining project developer.

One of the major prerequisites for the approval of a Prospecting License or Mining Lease application is the approval of the EIA/EMP by the Dept of Environment. For current prospecting activities/mining operations, relevant waste discharge permits apply. Additionally, the MRD's Environment Division carries out on-site environmental inspections to ensure waste emissions are within the discharge permit/mine environmental release guidelines and comply with socio-environmental standards, which are benchmarked against international standards/best practices.

Developers are required to post a refundable bankers guarantee, as surety of best practice. The amount of the bond will be determined by the MRD, in consultation with the Dept of Environment, according to the element of risk associated with the project. The full bond or a partial amount thereof may be used to remedy unacceptable environmental impacts of the mining project, or may be used as a penalty for late or non-remediation of remediable impacts identified during Environmental Impact Assessment process.

This is in line with the Government's Sustainable Development Policy.

### **Private Public Partnership PPP for sustainable mining**

Government's main aim for the mineral sector is to ensure that developments proceed in a sustainable manner. Sustainable mineral sector projects are those that effectively incorporate community participation during the corporate decision-making process, that ensure an equitable distribution of the benefits arising from mine developments, and that, having carefully assessed the socio-environmental impacts, minimise these impacts.

### **Emergency Response Plans and Preparedness at the local level**

It is a requirement that all mining operations develop a Mine Safety Management Plan (MSMP) incorporating an Emergency Response Plan, which is reviewed and passed by the MRD or consultants. Contents of the MSMP include:

- The management structure
- How risks are to be managed
- Arrangements for the safe use of plant and electricity
- Contractor Management Plan
- Emergency Plan
- The O.H.S Policy for the site and it's objectives
- The arrangements for training, instructing and informing persons on O.H.S matters
- The arrangement for supervision and communication
- The arrangement for supervisors skills upgrade in terms of on-site risk assessment and developing section emergency response plans
- Induction/training arrangements on site safety rules for any site visitors or new employees
- The establishment of safety guidelines and evacuation procedures
- The arrangement of having mock drills to test the response and awareness of employees (e.g. fire drill – surface & underground, stench gas drills etc).

### **Risk assessment of mines and mining activities**

Due to the hazardous nature of mining operations, the Government supports the promotion of risk assessment approach to mine safety, which borders on being pro-active and the subsequent implementation of preventative measures rather than being re-active and implementing corrective measures.

As part of the MSMP requirement, mining project developers are encouraged to ensure all employees undergo formal risk management training and are equipped with the necessary knowledge and tools to be aware of the risks that are confined to their respective work areas/work sites.

### **Rehabilitation of affected communities and life-supporting ecosystems, including mine site decommissioning**

Wherever possible, mines are expected to rehabilitate progressively during their operation. Government believes that, ultimately, this will reduce the total costs of rehabilitation. In line with Government's adoption of the precautionary principle, and to ensure that sufficient funds are available to complete rehabilitation at mine closure, the

mining project developer will be expected to make contributions to a Mine Closure and Rehabilitation Fund. The parameters and objectives of this fund will be established as part of the comprehensive Development Agreement, prior to mine construction. Contributions to the fund can be flexibly organised to reflect debt repayment or cyclical factors but the fund must represent a good faith effort by project sponsors to make financial provision for the maintenance or restoration of the mining area/community after

previous owner and settles these issues (rehabilitation, relocation and promotion of alternative livelihood for redundant employees etc) as part of the Mining Lease transfer.

The current Government and MRD's vision is to have a proper Mine Closure guideline/policy formulated and implemented as a binding document to ensure current and future mine developers carry out effective restoration and rehabilitation works as per nature of their project upon mine closure.

## **4.0 TEN YEAR FRAMEWORK OF PROGRAMMES ON SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS**

### **4.1 Summary - Agriculture**

Agriculture faces immense problem and challenges. As the population continues to grow, the food needs increases while the availability of the arable land decreases. Therefore, the shift in agricultural production towards a more sustained resource base where people, farming and forest interact harmoniously is crucial in order to meet the future challenges. This enormous task needs the commitment of the international community to facilitate the need in the agriculture sector that is beyond our economic reach to address.

The Sustainable Consumption and Production (SCP) framework addresses the concern of the United Nations Department of Economic and Social Affairs (UNDESA) theme, “Ensuring environment sustainability” at national level which provides a framework for integrating the principles of sustainable development into national policies. The agriculture sustainable plan framework basically supports the Mauritius Strategy Implementation (MSI) which focus on key thematic areas; Fresh water’, and, Land Resources’ article 38 to 43 in the MSI report. Achieving sustainable development while overcoming environmental challenges such as deforestation, land degradation, logging of water sheds, over exploitation of terrestrial and aquatic biological resources, improper waste management and pollution control.

#### **4.1.1 Land Resources, Agriculture and Rural Development**

The pressures on land resources that existed 10 years ago have only been exacerbated by competing uses, increased demands and land degradation.

National strategies have to be elaborated on sustainable land use, which tackle such issues as land tenure and management systems, combating desertification and protecting biodiversity. These strategies should include environmental impact assessments and identify the necessary policy changes and capacity-building needs within the framework of the three pi

deteriorates. This project continues the study of the effects of soil erosion on Fiji's environment. It has provided support for sustainable farming practices to minimise soil erosion and land degradation problems, stabilise the rural community socially, economically and environmentally. It collects, acquires and generated good quality land resource based information for sound decision making in agricultural development. The project has created awareness on the government's recently adopted Rural Land Use Policy. It has also addressed some of the issues stipulated in the Land Conservation & Improvement Act of which it is the Boards' secretariat.

*Viability:* Addressing the issues in the programme on land conservation and land degradation will save the nation millions of dollars otherwise spent on dredging, maintaining erosion, fertilisers and chemicals, food security, and other socio-economic problems. There will be an ever increasing demand from the land and quality land resources information can ensure sound decision making for its development. Long term stability in the agricultural sector can only be ensured through sustainable farming systems. Self sustained agricultural production systems will ensure the viability of farms for future generations.

***UNCCD Venezuela grant -Combating Land Degradation in Fiji through the Promotion of Sustainable Land Management Practices.***

In 2007 the Government of Venezuela provided a US\$2million Grant for the Pacific region to the UNCCD for combating land degradation. The Land Use section after submitting its proposal was approved US\$90,000 to commence with activities to combating land degradation in Fiji through the promotion of sustainable land management practices.

*Activity update* - To date five sites had been approved and project activities have been implemented. Activities carried out involves the establishment of pilot and demonstration farms, establishment and management of rural community managed nurseries and on-site training of farmers on SLM technology and nursery management. The overall objective of these projects is to promote land use practices with major emphasis on land conservation and land conservation.

The five current project sites are located at the three divisions;

- Western- (Vavinaqiri);
- Central/Eastern- (Navunikabi, Naiyala & Namoli settlement, Ovalau); and
- Northern division- (Koromakawa).

***Development of Sustainable Agriculture in the Pacific (DSAP)***

Sustainable Food and Income security for rural farm communities in economically deprived areas plus enhancing technical skills of farmers and national agricultural extension and research staff is DSAP Fiji's objective throughout the term of project and beyond.



***DSAP Fiji Projects***

DSAP Fiji Program in 2007 focused on capacit

Mismanagement of land and water resources is gradually resulting in the depletion of the nation's resources. Indiscriminate utilisation of these scarce resources will have serious impacts to the fragile economy as well. These issues need to be addressed with both long and short-term measures to ensure development and management of these resources in a sustainable manner.

The Land and Water Resource Management Division's Plan focuses on the following deliverable:

- efficient and effective drainage infrastructure maintenance works for the improvement and effective utilisation of agricultural land in the Central, Northern and Western Divisions;
-

The objective of the flood mitigation program is to provide protective measures to reduce flood damages to agricultural crops, buildings, towns and villages, settlements, infrastructures and educational institutions which run into several million dollars.

Through specialised river engineering technology, river monitoring, river dredging, land reclamation and river bank protections, works can be undertaken to protect the agricultural land, villages, towns and other infrastructures.

Land and Water Resources Management Division of Agriculture department, as the

### ***Export Promotion and Import Substitution Programmes (EPP & ISP)***

To address constraints in the agricultural sector, the MOA recently launched the Demand and Market Driven Approach (DDA) as a new mechanism to fund and implement the Ministry's programmes. The sole distinguishing feature of the new approach is the mandatory participation of the private sector. The DDA represents an integrated market driven agricultural assistance programme targeting progressive farmers, farmer groups or agribusiness in crop, livestock or value-added production that meets market demand. The inherent public-private partnership approach should not only mobilise private sector investment, given the equity requirement criteria, but also allow Government to be better in-tuned and responsive to the needs of the market. The Demand Driven Approach consists of five programmes: the Export Promotion Programme and the Import Substitution Programme. \$8.3 million have been allocated for 2008 and 2009 for export promotion and import substitution measures.

### ***Cottage Industry Development***

***Objectives:***

- Improve AMA's current operations and business portfolios;
- Increase the range of agro & aqua produce that it is dealing in, and allow for a wider representation and presence in other parts of Fiji;
- Refocus and work within the core functions of the AMA to deliver on the



*Capacity built on SLM* - Training conducted for awareness and workshops on SLM. Advise on setting up conservation/demonstration farms in localities. Participate on national environmental events to increase awareness on SLM concept, awareness training conducted in the Northern division and SLM technologies seen adopted by land user at various demo farms.

*Land use planning services provided* -

- (iv) Purchase and acquisition of materials;
- (v) Farm establishment;
- (vi) Nursery design and layout; and
- (vii) Raise agro forestry, fruit trees and forest species seedlings.

***SITE 2: Combating Land Degradation in Navunikabi through the Promotion of Sustainable Land Management Practices***

Navunikabi village is located in the province of Namosi. The topography is a combination of steep to very steep mountainous land. Shortage of flat land has forced people to farm on steeper slopes. Shifting cultivation and deforestation is commonly practice in search of good arable land. Erosion features can be seen on some steep lands and this is evident especially on deforested sites.

People of Navunikabi are mostly subsistence farmers growing a variety of vegetables, crops and fruits. Farmers in the area apply very few conservation methods. Advice on farming is a service that is desired by many of the farmers in Navunikabi. Extension Officers rarely visit this area and many farmers are not aware of the new technologies available for farming improvements. The objectives of the project are:



- To establish sustainable land management demonstration farm in Sugar cane production area;
- To provide awareness and training for neighbouring farming communities on Sloping Agricultural land farming system;
- To improve soil mineral status through introduction of deep rooted leguminous forage trees that recycle mineral that had been leached deep down the profile;
- Improving livestock nutrition through nitrogen rich legume trees; and
- Reduction of soil degradation by control grazing techniques.

Activities carried out since the commencement of the project includes:

- (i) Site visit & site selection;
- (ii) Site preparation;
- (iii) Training & awareness meeting with farmers and locality livestock officer;
- (iv) Purchasing of materials for demonstration farm;
- (v) Plot layout, fencing & land clearing; and
- (vi) Raising tree legumes and arachis cuttings.

### ***DSAP Fiji***

*On farm demonstrations (Tilivalevu)* - Out of the 3 demonstration farms that DSAP established, there are now 19 individual farms and 1 farm for the youth. Farmers have shifted from off-season vegetable farming as promoted by DSAP to trialling of farming even during the vegetable season. This has led to farmers selling at the Sigatoka Market

*The Local Technical Committee (LTC)* in Rakiraki conducted hands-on training with the establishment of 3 demonstration plots. Farmers were taught the importance of having conservation measures in place especially when farming on slopes. They were also taught on planting & maintenance of various vegetables plus harvesting. Other than vegetables & fruits, dalo & yaqona are also included in the demo farm.

*Harvesting & Marketing* -The vegetables plus watermelon was sold in the local Rakiraki market. The money obtained from the sale of the products was kept by the LTC to pay for land preparation in the next vegetable season.

*Nasinu Secondary School* - Only one demonstration site was established in Nasinu Secondary. The site serves 3 purposes:

- for food security : through promotion of local fruits & vegetables
- to educate students on good farming practices
- to promote agriculture as a means of income generation to students

All the produces have been used by the school. DSAP has supplied nursery materials to the school so that the nursery could be established for training purposes and merely for the fact that the School Farm Management can purchase and raise their own seeds.

*Young Peoples Department (YPD) in Davuilevu* - The aim of the demo site is similar to that of Nasinu Secondary. Now, YPD has its own nursery and are raising their seedlings. Vegetables were used during a Methodist Church Youth Annual Camp in November, 2007. Through this project, DSAP was also invited to facilitate during the camp in promoting good farming practices to the 1,000 plus young people from all over Fiji – most of who are unemp frrtsi.6( w)5by ojec71(.86(e)4.5( al)4.5a bP4.6( al)e n0 TD..003882c.2276 T

*Cottage Industry Development*

The scope for improvement of both the dairy and beef production on semi-commercial small farm holdings is large. These farms contribute significantly to overall production in both the formal and informal sector (subsistence). Assistance in strategic areas can lift production from these farms immediately and on a sustainable basis. It is expected that farmers will increase production from 3.5 Litres – 7 Litres per cow per day, resulting in an extra 5,000 Litres per day fetching extra income of \$2200. (\$800,000/year). There will also be extra income from the extra beef cattle produced.

#### ***Watershed Management program***

*Nadi Watershed*; Construction of Mulomulo weir dam in underway and the consultation with NLTB and resource owners for development approval is completed.

*Nasau Irrigation system*: Consultation with NLTB for development approval on lease land completed installation commenced in August and is progressing.

*Ba Watershed & Labasa Watershed*: Desk study for these projects has been completed with sites Identified.

#### ***Flood Protection***

*Nadi River Mouth dredging*; 1.8km of river was dredged with 365,000 cubic meters of material excavated. Also the Environment Impact Post Assessment (IEA) on prawn fishery resources was conducted.

*Qawa River Mouth Dredging*; A total of 125,734 cubic meters of material excavated And the dredging work completed on 10/7/08. Rewa River Dredging Environment Impact Assessment Study commissioned to assess environmental impacts on dredging activity in Rewa River.

### **4.1.5 Major Challenges and Constraints**

The most challenging food security issues for Fiji are sustaining domestic food production levels in line with food demand and market potential, and continuing the transition from subsistence to commercial agriculture. Fiji's ability to meet this challenge is greatly enhanced by its comparative advantage in the production of traditional food crops. This advantage is based on farmers' ability to grow traditional crops, consumer preference, and unavailability or high cost of imported substitutes. If grown in the traditional manner, without chemicals and in rotation, these are highly sustainable activities.

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commercial taro production has brought with it unsustainable production practices which need to be addressed through education and in some cases through regulatory enforcement.

There is an urgent need to commercialise the agricultural sector given that the contribution of the subsistence sector to agricultural GDP has remained constant over the years. Past interventions by the MOA to transform the subsistence sector to semi commercial have been failures. The main cause of such failures have been the adoption of a mode of project implementation whereby staff mostly focus on production with limited attention given to addressing constraints along the supply chain. The future Ministry's present plan seeks to replace top down, supply driven institutions with demand driven service delivery by government and the private sector to promote commercial farmers

Finance for farming remains a key constraint. The outreach of rural financial services is limited, because there are insufficient borrowers to make it viable. The uncertainty over Land Leasing Arrangements is an overriding constraint on the move to a more commercial focus. Allied to this, there is a need for farmers to develop better farm management and business skills, and to develop and implement business plans for viable enterprises which will in turn improve access to finance.

Marketing problems are prevalent in rural areas and outer islands in Fiji. Marketing networks are virtually absent or weak, and physical access to markets is constrained and costly because of inadequate infrastructure. Poor product handling practices and the absence of local cool-stores and grading and packing facilities lead to severe quality deterioration during the passage from farm to market.

A requirement of demand driven services is that the farmers need a means to communicate their demands. The small size and large number of farms is a constraint to effective communication, mechanization, technology transfer and marketing. Existing and new farmer groups need to be fostered and empowered so that they support members' needs in a farmer-to-farmer network.

#### **4.1.6 Expected Project Outcomes and Outputs**

Provided the issue of expiring land leases can be satisfactorily resolved a significant portion of the existing sugar industry can remain viable in the future, even at world market prices. However this will require significant, but achievable, reductions in costs. Thus the appropriate policy emphasis should be on improving the efficiency of the existing industry and not on encouraging large-scale transfer of lands out of sugar. This is indeed fortunate for no single crop or group of crops have been identified that could replace sugar in the foreseeable future. Yet, while recognising the continued existence of sugar, there is an urgent need, and indeed effort has been stepped up to accelerate Fiji's diversification efforts. These efforts need to be directed in the areas where the country has a sustainable competitive advantage.

As a small island economy, Fiji faces obstacles in the development process that are not present in larger countries. It is inherently less diversified which makes it more vulnerable to both internal and external shocks. With a small population, economies of scale are difficult to achieve in domestic markets and investment in infrastructure more costly and often uneconomic. In addition to problems of smallness, Fiji is relatively isolated, is prone to natural disasters, and operates under a land tenure system that constrains availability, investment and hence productivity. However there are offsetting advantages that stem from climate, location, a relatively pest free and unpolluted environment, natural beauty, and an ability to grow a wide range of nutritional, traditional foods. Fiji's appropriate long-term agricultural strategy should be focused on minimising the disadvantages of size and isolation and maximising the advantages of Fiji's location and environment. The areas that best satisfy these requirements are traditional food production and high value niche exports. With suitable conditions in the right location these are the crops that can give the highest returns to farmers' land and labour resources and provide the greatest possible level of food security. Therefore, these projects integrated with the common economic theme of sustainability in the Agriculture sector to promote economic well being.

Thus, by addressing towards the mitigation of land degradation through the promotion of sustainable productive systems that maintain ecosystem productivity and ecological functions it will contribute directly to the environmental, economic and social well-being



- Good Governance;
- Public Acceptance; and
- Energy Efficiency and Conservation.

The department has also included the four strategic areas in the formation of its Annual Business Plan since 2006. For this year the detailed activities includes:

***Strategic Area 1: Energy Planning***

Institutional Strengthening

Energy legislation

Power Sector Development

National Energy Advisory Committee

Energy Information & Database

Public Outreach

Renewable Energy Development Infrastructure

Hydro Potential Report

Corporate Documents

Waiving of Taxes for Renewable Energy Technologies

Admin workplan

Accounts workplan

***Strategic Area 2: Energy Security***



## **4.2.2 Major Constraints and Challenges**

Development constraints and challenges include;

- lack of technical expertise in the application Renewable Energy Projects;
- Costs for the implementation of Renewable Energy Projects;
- Lack of quantifying data available for biomass and biofuel projects;
- Inconsistent services by shipping companies for outer islands;
- current high price of oil and the impact of this on domestic costs and the fuel import bill;
- current regulatory arrangements in the electricity industry;
- the lack of a regular energy sector information database; and
- weaknesses in the delivery mechanisms under the current Rural Electrification Policy.

*The major issues regarding the energy sector that was outlined in the 2008 Budget address are as follows:*

1)

<b>Policy Objectives</b>	<b>Strategies</b>	<b>Key Performance Indicators</b>
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**Housing &**

explain to the respective landowners the opportunities and benefits of re-leasing their reverted lands.

***Objectives***

CBUL was established to:-

To promote better utilization of land by approaching landowners to give up their unutilized ALTA reverted lands, and other available lands, for lease to prospective tenants who can maximize farm returns; and

- (ii) To ensure that the landowners realize the benefits that they and their future generations will reap if they allow their land to be leased rather than being left idle.

***Taskforce Teams***

The Taskforce will spearhead efforts to promote better utilization of land on ALTA

- **Ex-Tenants**

Like landowners, ALTA tenants have also lost part or all of their household income. With their little savings, they have moved to ALTA re-settlements areas where they are engaged with a totally different type of farming or to move to other areas and engage in informal activities to generate much needed income. However, most have opted to move to towns in search of jobs resulting in the rise of squatter settlements especially in Suva. Most of these ex-farmers lack technical skills such as carpentry and engineering thus; contributing to the high unemployment rate.

These displaced farmers in their new residences have to rebuild their lives by building new homes, finding new schools for their children and adjust to new life styles. All these changes have affected them psychologically and also chew up a sizeable portion of their savings and some have been left penniless and poor.

- **Nation**

The Sugar Industry, a backbone of Fiji's economy is now finding it difficult to meet its export quota because of a decline in cane production and is on the verge of collapse. This has affected the overall economy by the decreasing sugar returns and reduced consumption capacities of those directly relying on the industry.

The increase in urban drift has resulted in the overall increase in squatter settlements and a decline in rural population especially in sugarcane growing areas. This has pressured Government to divert more funds to solve the squatter problem and is likely to reduce funding in the future on the depopulated areas for reasons of economic viability.

- **Benefits To All Stakeholders**









*Squatter Settlement* – About 200 families moved to new houses under Housing Authority lease at Waila Subdivision and at Field 40 in Lautoka. Development works is currently in progress in Badrau, Ba and Sasawira. At the completion of this project, another 200 families are most likely to benefit.

*Self-Help Projects* – Multi-Ethnic funded 302 self-help projects while 694 recipients benefited from Provincial Development funding.

*Family Assistance* – The number of people assisted in 2005 increased by 9.9% to 22,534 compared to the previous year. Fijians & Rotumans continue to receive the bulk of the assistance by number and value. The demand on this programme is high and the commitment by Government through increased budget allocation from \$12m in 2004 to \$15m in 2005 enabled more disadvantaged to be assisted.

Indications are that this trend will continue and the dual challenge is how to meet this increasing demand while at the same time ensuring that those who genuinely deserve assistance are identified and assisted.

**iii. *Participation in Commerce and in All Branches of State Services***

There have been no specific programs for employment in State Services for the last 5 years and it should be a consideration for the future. The 7 existing programs under the category are directed towards participation in Commerce.

Five of the seven programs are for the specific benefit of the indigenous community. The under-participation of Fijians/Rotumans in business is an acknowledged fact by various governments both before and since independence. The 5 programs are seen as a means of narrowing the social and economic disparity between indigenous Fijians/Rotumans and other ethnic groups.

In 2005 alone, about \$14m or 1.0% of the national budget was set aside for the continuation of the 7 programs.

The increasing focus and development relating to small/micro-enterprises suggest the opportunities and potential these have in providing basic income and employment for the disadvantaged. Highlights include:

*Small Business Equity Scheme* – In 2005, the value of loan approved to indigenous Fijians increased by 108% to \$2.208m. Grant given amounted to \$384,334 or 16% of the loan value. A total of 51 loans worth \$0.781m were approved for other communities. The grant component of the loan was \$108,778 or 14% of loan value. Most common s in(ss)-8.8( )TJ0 -1.1465 7 lmi ant s tr v whic-45.8(l)11.1((( a)-4.8(s)-2.9(weAll)-628(. )TJ6 -1.1517 TD0 Tc0 Tw( )Tj/TT11 1 Tf-6 -1.

business during the year and provided business advice and technical support to 1398 individuals.

Increase participation through the Social Justice Regulation – the performance of Fijians and Rotumans under the SJR provisions is disappointing. Since 2000, Fijian participation in PWD contracts had been below 1%. The participation in Government supplies contracts through increasing is still below 40%.

The low participation could be attributed to a number of factors, including the lack of initiative by the target group to fully utilize the assistance given through the reservation

AAP has been in existence for almost ½ of its 10year prescribed life span. In general, the 2005 Report as in previous issues, measured success in terms of the increase in the number of people or groups assisted under the program from approved funds. However, to gauge the real performance of these programmes would require a full impact assessment or comprehensive review; this is recommended in the medium-term.

The challenge that lies ahead requires a holistic approach. Amongst recommended courses of action are wider consultations with relevant stakeholders including target groups and beneficiaries; reviewing supporting legislations; strengthening research as basis for action; and including a capacity building component into the programmes. At the same time, the success of AAP would be greatly enhanced if the machinery to implement and monitor each program was clearly and appropriately identified. This could be done under a project implementation plan that also incorporates principles of good governance and best practice.

#### **4.3.4 Way Forward**

The strategic framework for Change confirms the continuation of the Programme and the need for review. The review will include:

- i) The AAP is to be reviewed as required under *Pillar 7: Reducing Poverty to a Negligible Level by 2015* in the Peoples Charter, to comply with the existing relevant legislations on equality and justice and the Declaration of Human Rights. The Review is also required to consider areas such as the race-based Programmes, monitoring and reporting mechanism, key outcomes and indicators and the Social Justice Preamble.
- ii) The Peoples Charter also require that a Research and Analysis Commission be established whose members are to be drawn from the academic and civil society and be appointed by the President. Its main role is to ensure that the data that will be used as the basis of formulating AAP Programs are independent, reliable and unbiased.

#### ***Centre for Appropriate Technology & Development (CATD)***

The CATD is responsible for the provision of short and long term technical training for young people and adults especially women in rural areas. The purpose of conducting this training is to provide the target group with the necessary skills and the encouragement to pursue small scale commercial undertakings that will help to support their largely subsistence lifestyle. The training also allows their communities to have those skills that would assist in their personal and community development.

During 2008, the CATD was provided \$900,000 and was able to offer training in the following courses/programmes.

#### ***Long Term Technical Training Programme (LTTTP)***

80 trainees went through the LTTTP during 2008 in Metal Work, Village Installations, Plumbing/Sheetmetal, Welding /Fabrication, Automotive Engineering and Carpentry &

Joinery. Of this total, 15 graduated in Automotive Engineering, and 15 in Carpentry & Joinery.

Twenty six (26) of the 30 trainees, who graduated, also passed their TPAF Trade Test and were issued with the National Trade Test Certificates at Class 111 Level in their respective trades.

#### ***Rural Community Outreach Projects***

The following were undertaken by Long Term Technical trainees:-

- Construction of one Drum Oven Stove for the Father Law Home at Veisari, Lami.
- Construction of a three classroom building was undertaken and completed by Carpentry students at the Noco Junior Secondary School, Rewa.
- Engineering students were involved in the repair and maintenance of 43 equipments involving 11 outboard motors, 19 brush cutters, 5 lawnmowers, 4 chainsaw and 4 portable generators. In addition they also repaired 8 private vehicles and carried out the servicing of all the five Centre vehicles.

Such programme helps trainees to gain hands on experience while assisting communities to complete their development projects.

#### ***Rural Community Technical Training Programme***

This programme has been fully completed.

- 10 Outboard Motor Maintenance & Servicing Programmes in Kadavu, Tailevu, Serua, Bua, Cakaudrove, Macuata, Namosi, Ra, Ba, Naitasiri, Namosi.
- 267 villagers were trained and 275 equipments were serviced or repaired during the training. Details are in the VISUALS of this report.
- 1 Village Sanitation Training was conducted at Nakalou Village, Macuata. 17 villagers were trained and they constructed 13 flush toilets funded under the Village Improvement Scheme (VIS)

#### ***Short Term Seminars/Workshops***

32 workshops were conducted with 1062 participants. Details of these workshops were 0029 Tc-(si)-eT

***Rural Fijian Women Training Programme (RFWTP)***

The programme continued its Team Building and Planning Training which aimed to assist rural Fijian Women organizations to be better organized and focused with clear direction about the types of development they want to undertake. Under the programme, 667 women were trained in 25 different locations in 14 provinces. In addition, 380 training motivators from 14 provinces were also trained.

Women organizations in villages were able to prepare development plans with clear vision and mission statements and lists of activities they were to undertake. 380 Village Training Motivators were also trained and 68 follow up visits were made to villages that were attended to in 2007.

The follow up visits undertaken indicated that most rural Fijian Women Organisations were involved in village beautification.

## **5.0 TRANSPORT**

### **5.1 Summary - Transport**

Transport remains to be a vital component of the economy contributing to around 10 percent to GDP. The goal of this sector is to provide efficient transport services at reduced costs to enhance access to services and markets. The transport sector includes land, sea and air transport.

In 2004, the Department of Environment in consultation with Ministry of Transport through an ADB funding undertook a detailed assessment of vehicle emissions in Fiji.

An Action Plan was developed for the reduction of vehicle emission through wide consultation. With changes in ministry portfolios and staffing, it is anticipated that this report would be implemented with necessary changes.

It is reality that vehicle emission is contributing towards climate change and air pollution,





## **6.0 WASTE MANAGEMENT**

### **6.1 Summary – Waste Management**

Environmentalism promotes just and equitable access to resources. The natural environment is an integral part of Fiji's products and services and the quality of nature plays a significant role in the success of any socio-economic development. As such, the generation and disposal of wastes does have direct and indirect impact on the socioeconomic development of our nation. The Government has taken steps to support sustainable resource management and encourage environment conservation through the Environment Management Act (EMA) 2005. The Act sets guidelines and policies for environmental impact assessments, waste management, pollution control and penalties.

Waste material present wasted money in-terms of original cost of materials, cost of materials, cost of disposal and also potential value of the material as a recyclable and reusable resource. Poorly managed wastes can have negative effects on tourist destination image and by association with health warnings about infectious and vector-borne diseases

### **6.2 Programs/Projects**

Waste cannot be reduced without a system that manages waste from the point of generation through to disposal. Below are various programs/projects currently being implemented by the Department of Environment in the effort to minimize waste at a National level:

#### ***EU Funded 'Lami Rehabilitation Project'***

Following the opening of the Naboro Landfill in October 2005, the Lami Dump, which constituted the main site of rubbish disposal for the greater Suva area, has been closed. However, serious environmental risks remain at the dump including emission of leachates, gas and the risk of fire or tidal wave.

To assist the Department, the European Union granted EU 550 000 for the rehabilitation of the Lami dump. The overall objective of the project is to assist the Government of Fiji in its capacity to work towards an improvement of the environmental situation in Fiji, in particular as regards to solid waste management and rehabilitation of Lami Dump and other institutional support services.

Hydea an Italian company was contracted to carryout Phase I (preparation of tender documents) of the project. The contract duration of Phase I is two (2) years which begun on 27

### ***Waste Minimization and Recycling Promotion Project***

The request for assistance for a “Waste Minimization and Recycling Promotion Project” was proposed to the Government of Japan and the project was considered by JICA to be initiated in the western division (Lautoka City and Nadi Town. JICA have selected the consultants Kokusai Kogyo Co., Ltd and Ex Corporation to jointly implement the project. First team arrived on 17<sup>th</sup> October 2008.

The overall goal of the project is to develop and promote the idea of 3R (in this case, Reduce, Reuse, Return) mainly in the western division of Fiji.

The outputs of the project are:

- 1) Solid Waste Management Plans focusing on 3R are developed respectively in Lautoka City and Nadi Town.
- 2) Lautoka City and Nadi Town obtain the capacity for proper Solid Waste Management (SWM) through the implementation of Pilot projects.
- 3) Lautoka City and Nadi Town obtain the capacity for 3R promotion activities at whole is implemented at whole area of Lautoka city and Nadi Town Council.
- 4) Awareness of residents in Lautoka City and Nadi Town is raised through implementation of environmental education activities on 3R promotion.
- 5) 3R model for Fiji is developed and recommended.

### ***Progress of the Project - First Year***

To date the team have conducted eight (8) different baseline surveys including a Waste Amount and Composition Survey, Final Disposal Amount Survey, Time and Motion Survey, Public Opinion Survey, Compost Demand and Market Survey, Recycling Activity Survey, Community Survey and Topographic Survey in Lautoka Landfill. A survey was also conducted at the Lautoka Vunato Landfill site

The Community survey collects basic materials necessary for selecting 3R pilot project site and also information for studying about how the 3R activity would be promoted in the whole area of Lautoka and Nadi and how it is disseminated to other areas in Fiji.

### ***Container Deposit Legislation and Sustainable Solid Waste Management in Suva, Fiji – Project by the United Nations Development Programme (UNDP)***

Phase I of the project started in April 2009 with a Feasibility study on Managing Solid



The key objectives of the national solid waste management strategy are to:

- reduce the amount of waste that each community generates;
- make best use of the waste that is generated;
- develop and implement economic and social incentive mechanisms to change wasteful behavior, improve and upgrade existing waste management and disposal systems;
- encourage/provide waste management practices, which minimize the environmental risk and harm to human health; and
- Provide a guideline template for rural or community level solid waste management practices work.

The department is implementing this strategy through requests made from the general public and the community in specific. Number of waste management workshops and training have been conducted to the industrial business community and the rural communities on waste minimization through the emphasizing the use of the 3Rs. For effective implementation, the NSWMS Action Plan requires the development of an Integrated Communication Plan. A plan was compiled with the assistance of SPREP through a roundtable consultation with relevant stakeholders in May 2009 and a draft plan is now available for review.

The Department of Environment (DOE) has been charged with addressing Objective 6 of the (NSWMS&AP) which states, "Upgrade current dump sites in urban centers by 2009." Objective 6 stipulates that a Minimum Operating Guideline for all dump sites be established as well as upgrade at least 3 current dump sites to meet the Operating Guidelines. In order to achieve this Objective, workshops were scheduled for both Vanua Levu and Viti Levu to train the Municipalities on how and why to upgrade from the current practice of open dumping to what is referred to as a controlled dump system. Both workshops had been conducted, Vanua Levu on 27<sup>th</sup> May 2009 and western division of Viti Levu on 25<sup>th</sup> June 2009.

#### ***Other Waste Management Strategies***

Other strategies implemented by the Department is the National Liquid Waste Management Strategy, National Air Pollution Strategy, National Plan for the Implementation of the Stockholm Convention on POP's in Fiji, Rural Waste Policy, Chemical Management Plan.

The greater Suva area is now fortunate to have a sanitary engineered landfill (Naboro Landfill) opened in October 2005 which services Suva City Area, Nasinu Town Council, Nausori Town Council, Navua Rural Local Authority and Korovou Rural Local Authority. It is an Anaerobic Landfill System that was funded by the European Union. It is maintained by a Private Contractor, H.G.Leach, and administered by the Department of Environment.

This landfill has alleviated some major solid waste problems associated with open dumps, such as health concerns from flies, rodents, and environmental health concerns from leachate.

However, a lot is still needed in terms of consistency of waste received from the councils

