

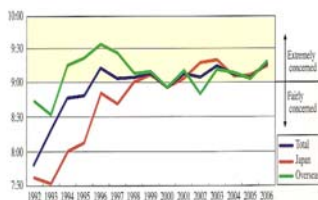
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Samoa needs to strengthen agricultural education

Submitted by Ioane Malaki, SAFT Alafua Campus

Samoa Crops Cooperation Association (SCCA) sees the need to boost agricultural education, to strengthen the country's economy as well as keeping in base with food security issues.

According to the Secretary Treasurer of SCCA, Aiolupotea Jeff Atoa, "school leavers in Samoa generally see agriculture as the last resort in terms of career opportunities."

His view was expressed during a recent presentation at USP's Alafua Campus' monthly public lecture/seminar series. This he believes has led to low self-esteem in the industry as well as earning a rating of "low priority in terms of educational opportunities".

The irony though is that "agriculture remains the backbone of the

Samoa economy with two-thirds of households engaged in some form of agricultural activity, a mixture of subsistence and commercial agriculture. As the major economic activity in the rural areas, agriculture plays an important role in the process of rural development".

Agriculture, once the leading industry has been nudged aside, particularly by tourism among others, inducing the labour force to move away from the rural and into other sectors such as housing, construction and services. These are currently booming thanks to high national economic growth. One effect of this he said was that agricultural

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SAFT student explaining to St Mary's College students some of the importance aspects of agriculture. (IRETA pictures)

Samoa needs to strengthen agricultural education.....from page 1

production falls short of meeting domestic market demands, especially in fruits and vegetables that can substitute for those being imported.

Teaching farmers better farming skills and finding markets for their produce are important, but also important is the need to “encourage secondary (school) students to undertake (agricultural) courses through USP. The more quality people of Samoa (in agriculture), the better the future for agricultural development”.

With Samoa in close touch with global issues such as climate change, the introduction of new technologies and above all food security, agriculture becomes a discipline that needs to be carefully studied, analyzed, researched and practiced.

According to Aiolupotea’s presentation, agriculture in Samoa needs to develop beyond the limits of just subsistence, just having enough food for the nuclear family to survive.

The household farm needs to move on to the more semi-commercial and commercial ways of farming. Farmers need to carry out better short, medium and long term planning so that a piece of land continues to be productive at all times.

He added that proven and scientific practices such as mixed and rotational cropping to maximize the use of the soil must be adopted. More methodical planning is needed so that the outputs from the land complement each other, so that there is a continuous source of income for the farmers.

In fact, one of the aims of the association is to help members acquire these skills. Other technologies, for example clear plastic sheets to establish nurseries and carry out direct farming, need to be sought from abroad. Australia probably has access to such discarded materials. With such simple materials and local posts members can construct imitation glasshouses to raise seedlings and grow crops and not have to be left to the mercy of the daily weather.

“The weather is becoming

increasingly unpredictable probably as a result of climate change” and suggested that the need to control these changes are part of the successful way forward.

SCCA was formed in 2004 in an attempt to develop agriculture especially in exports and value adding following the demise of the traditional export commodities made up mostly of copra, cocoa and taro. It aims to provide leadership to the industry, initiate market development, facilitate research, training and development and represent growers’ interests.

The association is relying on partners such as USP’s School of Agriculture and Food Technology/ IRETA at Alafua Campus, the Samoan government’s Ministry of Agriculture and the Chinese South Corporation to fulfill its aspirations.

It’s most recent challenge as an association was negotiations with the Samoan government to agree for the group to locally supply

at least 70% of the fruits and vegetables needed to feed the hundreds of athletes, officials and guests to the South Pacific Games in September this year. There was some apprehension and reluctance on the part of the food caterers but the association was adamant that it had the quantity required and that systems were in place to ensure the availability of produce with the highest quality. After all the association had planned for the games several months prior by securing help from SPC, FAO, South South Corporation and USP Alafua to ensure that it could rise to the challenge of providing most of the fruits and vegetables needed for the 2007 South Pacific Games.

“If you do your planning correctly such as in the rotation of crops from one plot to another after each planting season pests and diseases can be controlled. If you take care of the soil in order to maintain its fertility and avoid erosion you are working successfully towards the sustainable use of your land. If you carry out this planning and adopt good farming practices, it’s amazing what you can produce from a small quarter acre of land”



Aiolupotea Jeff Atoa examining an eggplant at his demonstration nursery. (IRETA pictures)

Threatening factors on regional food security

Submitted by Nicks Maniha, ALO PNG

Food security for the Pacific region is under increasing threat from socio-cultural, environmental and economic factors, according to a presentation at the Economic Research Workshop on Pacific Agriculture held at the National Agriculture Research Institute (NARI) at Bubia near Lae.

Presented by National Agriculture Research Institute (NARI) scientists, Louis Kurika, John Moxon and Meli Lolo the message was that there is a serious need to address the wide array of threatening factors on food security for many small Pacific islands and atoll countries.

The scientists said because of this, there was an urgent need for governments, non-government organizations, research and development agencies and communities to intervene and strengthen existing food production and supply systems for small islands and atoll countries to sustainable levels.

They said there were no definite and easy ways to address the factors, but undertaking research and development strategies that focused on improving subsistence agriculture and cash earning opportunities would be the way forward.

The main issues affecting food production and supply system in the region include the harsh environments; economies that are characterized by serious trade imbalances with increased reliance on imported foods, goods and foreign aid; high population growth rates which placed pressures on resources, nutrition and health, land, transport and communication services; narrow crop genetic bases, natural disasters, use of traditional methods of processing and preservation and small export bases.



A vegetable nursery - one of the most practised form of food production throughout the Pacific region. (IRETA pictures)

Home gardening through simple hydroponics

IRETA Staff reports



Hydroponics is growing plants in water by providing essential plant food in it. There is no soil involved so the plants will require support to stand and grow in water.

The idea of hydroponics started in England way back in the 17th Century but the real science of hydroponics was understood more fully in the 19th Century when two German plant physiologists grew plants in mixed solutions of simple inorganic salts to show they were essential plant nutrients.

In everyday life, we see plants growing in soil all around us in its natural state or are being cultivated by farmers. This leaves an impression on us that plants can only be grown in soil. That is not so. We now have the technology and know-how to create suitable environment so that desirable plants can be grown in water for food.

Although the hydroponics idea may sound a bit complex it is really a very simple technique and anyone can adopt this technique at home. Hydroponics is particularly convenient for atoll countries where there is shortage of land and suitable soil to grow plants. Hydroponics is also useful for urban dwellers in any part of the Pacific who are squeezed for space and need regular supply of vegetables for home use on a daily basis. In principle, any plant can be grown in hydroponics. However in practice, a wide range of vegetables - - lettuce, cabbage, cucumber, tomatoes, beans, herbs are recommended for the beginners.

There are five basic items you need to start up a simple hydroponic garden at home.

- i. A plastic container to hold water and grow plants in.
- ii. Clean water
- iii. Support to hold plants in the container with water
- iv. Plant nutrients to feed the plants and
- v. Seedlings of cabbage, lettuce etc that you want to grow.

It is this simple. Out of the five above items you can find all at home except for the hydroponic plant nutrients. This, you can buy from a supplier in your home town for a small cost. Now you will want to know how to go about

Home gardening through simple hydroponics.....from page 3



growing your lettuce. Instead of me describing the steps for you to follow in setting up a hydroponics garden, let me share my experience how I did it at home and you can then adapt your techniques with the materials you have at home. The picture above shows all components of the hydroponic set up.

For a container to grow lettuce and hold water, I selected a discarded wash tub. This holds about 90 litres or about 22 gallons of water.

To support the lettuce seedlings I used corrugated perspex (light transparent plastic) that was lying around and cut it to sit on top of the wash tub edge to edge without touching the surface of the water. I then took the perspex and made holes on this plastic corrugation using a 10cm long (4") nails, spaced about 6cm apart to suspend the lettuce roots in to water through these holes which are no more than 1cm wide. In this way, I was able to fit 36 lettuce seedlings in an area of (0.26 sq m) or about 2.7 sq ft. If the figures I gave in square meter does not make sense, then just take the centerfold of any newspaper (whether it's Samoa Observer, Fiji Times or Solomon Star) fully spread is the area I am talking about. So it's a very small area that you need in your back yard to set this unit.

As for the other two items - - water and lettuce seedlings, you should have no problems with those at home.

So how did I go about planting and maintaining it. It's just too simple. I filled the container (wash tub) with clean water, followed the instruction on the label and mixed the fertilizer into the container. Then, I placed the perspex as a cover on top of the wash tub and planted the lettuce seedlings through the holes. I carefully washed the roots of each seedling to get rid of any dirt getting into the water before planting. That's it. All I did each day thereafter was to see how the plants were doing. I had to add some



nutrient and fresh water occasionally to maintain the health of the plants. You can see from the pictures, the whole outfit with the lettuce growing in it.

Now you can also grow cabbages and other vegetables if you like using this simple technique. You may have to provide a bit of shade initially when you have just planted the seedlings. Once they start growing, full sun is no problem. Excessive rainfall could dilute the nutrient solution and affect the health of the plant. To avoid this problem you can place the container close to the house on the sunny side or cover it when it rains.

If all the above still sounds complicated I hope not, then there is even a simpler, more cost effective and space-friendly system. I have this also at home and it's doing very well. Just get a plastic basin from your kitchen, fill it up with the nutrient solution and water, cover it with 1cm square mesh wire, fold it on the sides so that it grips the rim of the basin and suspend your lettuce or cabbage seedling roots through the mesh - - space it 2-3cm apart. The picture below shows the simple hydroponic set up with lettuce growing in it. The area of this basin is only 1.5 sq ft and also has 36 lettuce plants growing in it.

I am ready to eat the lettuce and it is just three weeks old. If you need further information on any aspect of this simple hydroponics set up, then contact IRETA. The address is given in this SPAN newsletter.

Happy home gardening and remember vegetables are extremely important for good health.

Prime Minister opens agriculture field day

PM Bainimarama - Opening remarks at Agriculture Field Day Fiji Government Online reports

Minister for Agriculture, Mr. Jainend Kumar;
Distinguished Guests
Farmers and your families
Ladies and Gentlemen

Mu sa cola vina. Namaste and Greetings to you all.

Thank you for your invitation to me to be your Chief Guest for the Field Day today in this famous Sigatoka Valley, the "Salad Bowl" of Fiji.

At the outset, please allow me to extend my deep appreciation for the traditional welcome accorded to me and the members of the Government delegation this morning. In fact, I did not quite expect this traditional welcoming ceremony to be accorded to me in this remote location, so full of fresh vegetables and lush vegetation.

Ladies and gentlemen, the theme for today's Field Day is "Enhancing Agriculture Export". Such a theme augers well with the Interim Government's mandate for speedy economic recovery and sustainable development that aims to reduce poverty and ensure food security for all in the medium to long term.

Agriculture is not only the main source of our livelihood in terms of food supply and security for our families, it is also a sector which has remarkable untapped potential for Fiji in areas of investment, exports, import substitution and employment creation.

Your Field Day today is a small but an important step in creating awareness about the potential which the agricultural sector has for our nation. It is important at this juncture for me to briefly highlight what the Interim Government is planning to do in terms of policies and programmes to further revitalise agriculture in the short to medium term. In this regards the Interim Government has embarked on the following:

- review the structure and focus of Ministry of Agriculture to make the Ministry more responsive to needs of farmers and stakeholders as well as for improved public service delivery;
- review and restructure the role and functions of Agriculture Marketing Authority (AMA) in an effort to get the entity to assist in collection of produce from rural and remote areas for subsequent marketing both locally and overseas;
- improvements in rural infrastructure and services, including roads, water supply and electricity;
- fast track processing and approval of permits involving agricultural projects;
- mount comprehensive public relations and awareness campaigns involving landowners and tenants on the benefits of extending expiring ALTA leases within provisions of existing laws. In this regards consideration will be given to revival of the proposal for a Land Use Commission purely to promote higher utilisation of available land for the maximum benefit to landowners, the tenants and the country as a whole.
- concerted efforts to curb crime, not only in urban areas but also rural communities, particularly theft of livestock, crops and farming implements;

- development of strong linkages between tourism and agriculture to enable farmers to benefit from a growing tourism industry;
- provision as part of National Export Strategy a sum of \$500,000 to Nature's Way Co-operative Limited for expansion of fresh produce treatment facilities and \$1.5 million to FDB for credit facilities to support exporters. A task force team has been set up within Ministry of Agriculture to liaise with FDB in this regards;
- endorsement of a rural and outer islands development programme which inter-alia entails provision of \$2 million to support development of agriculture and alternative livelihood opportunities in rural areas and outer islands; and
- allocation of \$5 million to kick-start a range of economic activities with primary focus on agriculture as part of Northern Development Programme for Vanua Levu.

On both sides of valley road, we can see great impact of scientific and technological ideas on agricultural production, especially for farm fresh vegetables and other root crops. Clearly on the various farms I passed along the road, I saw implementation of best practice techniques and know-

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Prime Minister opens agriculture field day.....from page 5

how to bring about much needed improvements in production and quality of fresh produce.

Passing the Nacocolevu Agricultural Research Station, I saw a different pattern of agricultural farming. I was told, it is the work of the farmers working closely with the Taiwanese Technical Mission here at Nacocolevu.

A bit further down the road, I saw another different type of farming practice. I was told it is the work of Chinese farmers, brought here from the People's Republic of China.

Passing those farms and coming close to this site, I can see the work of our local farmers tending to their vegetables and root crops in a very similar farming style and practices to our Chinese farmers. I understand that these Chinese farmers are greatly assisting our local farmers in getting better integrated into commercial style agriculture.

Ladies and gentlemen, another big lesson I have learnt from this visit, is to see so many of our Fijian women participating in commercial agriculture. I am told these women are engaged productively in picking up farm fresh produce, cleaning the root crops and other farm work, which are commonly practices by men in other parts of Fiji.

The message that I get from what I have seen so far is that successful farming is very much based on hard work, adoption of best practice farming, timely support from Government in terms of infrastructure, effective extension services, assistance in marketing and training in post harvest handling practice. I believe this is a model for commercial agriculture that can be replicated elsewhere around the country.

On that note, I must therefore congratulate Mr. Mahen Kumar for his vision in setting up a farm fresh produce collection site here at Bilalevu Road. It is centrally located amidst many successful farmers. I understand the collection of farm produce would be centralised here for processing, packaging, refrigeration and subsequent transportation to Lautoka Wharf for direct exporting to New Zealand and other overseas markets.

I am told that Mahen Exports was established in 1986 and since then it has continued to export its farm fresh produce to those overseas markets with increasing volume. These farm fresh produce include okra, baigans, pawpaws, dalo, ivi, cassava and many others. Some dalo are also brought in from Taveuni and Vanua Levu to be processed here, ready for exports.

I must thank him and his efforts in helping us drive Fiji's agricultural sector forward this way. I am sure his model can be repeated in many other parts of Fiji so that agriculture continues to contribute to development and growth of our economy in a significant way.

I would also like to note and recognise the contributions of landowners, villagers and each and every farmer here in Sigatoka Valley in our joint efforts to improve the performance of the agricultural sector in our economy.

With these brief remarks, I am pleased to declare this Agriculture Field Day Open.

PNG farmers train on draft animals

Submitted by Nicks Maniha, ALO PNG

The National Department of Agriculture and Livestock (NDAL) in collaboration with South-South Corporation (SSC) program have successfully trained two young men with vital skills in utilizing draft animals in land preparation for cropping and transport. The training which lasted for three months was conducted at the Erap Agricultural Resource and Development Center (ARDC).

The training was facilitated by the Department of Agriculture and Livestock Northern Regional Office and the Food Security Branch under the Draft Animal Development Program, with the technical assistance from SSC as counterparts.

The training was provided by a livestock technical staff from the Philippines Technical Mission attached to the SSC based in Lae, Morobe Province.

The main objective of the training was to train farmers to become trainers in training and training of draft animals such as cattle and buffalo in agricultural land preparation and carry of weights.

The training was conducted through hands-on and on-field lectures in all aspects on taming and initial training on the use of moldboard plow and upland harrow for land preparation.

SSSPP highly regarded to continue training

**Report by Soldier Buruka, Public Relations Officer,
Department of Agriculture & Livestock.
Submitted by Nicks Maniha, ALO PNG**

Agricultural service providers in the Morobe Province of PNG want the Smallholder Support Services Pilot Project (SSSPP) to be continued.

The service providers, mostly leading farmers engaged under the SSSPP to conduct farmer training and other agricultural activities, say the concept has proven to be successful and is highly regarded in the rural communities.

Several service providers said that the SSSPP has gained support amongst farmers in the rural communities and they want the concept to continue and also extend to other areas, The service providers are active members of the Morobe Service Providers Association.

The SSSPP concept, the contracting of extension services based on farmers' needs is being piloted in the Morobe and Eastern Highlands provinces and has been accepted as the most effective way of providing support services to the rural communities.

SSSPP funded by the Asian Development Bank (ADB), the national and provincial governments will finish

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SSSPP highly regarded to continue training.....

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in December, 2007 and discussions are currently taking place to determine an exit strategy.

Morobe province service providers told a recent project review that many farmers and their families have benefited through the SSSPP and are experiencing some improvements in their lifestyles.

There is a lot of interest in the rural communities but not enough agricultural services. Many people have expressed their desire to participate in the project.

Peter Linibi, a Markham Valley farmer who has trained many farmers in rice and vegetable production, cocoa husbandry and coconut downstream processing, said everyone accepted the SSSPP concept because it produced positive results.

There is a big demand for the project to be continued and expanded to other rural communities in the country.

He said whilst the project promoted basic farming, there is a need for other services to be improved such as access to credit, post harvest and marketing, transportation and farm machinery.

Sising Sawanga, a trainer in vegetable farming, said under the SSSPP concept many farmers have knowledge and skills but the government needs to provide more services such as access to credit.

Other service providers, Dickson Yangua (soap processing), Rodney Manzu (vanilla), Maria Linibi (vegetable), and Manu Garabi (peanut) also spoke highly of the SSSPP concept and vowed to continue providing essential farming services if called upon.

The environment doomsday clock

IRETA Staff reports

The Asahi Glass Foundation in Japan has released a 15-year summary report on survival of humankind in July 2007. This 22 page report covers several topics within the broad subject of environment. For this article we are only highlighting the findings of the “Awareness of the Crisis of Survival of Humankind” from the whole report.

A total of 155 countries out of the 198 selected throughout the world participated in the research survey.

Fifteen countries from Oceania were surveyed but 9 actually responded. IRETA-USP as a regional institution also participated for over a decade in this survey.

The result of the findings suggest “extreme concern” on the “Environmental Doomsday Clock”.

The question that was asked continuously by researchers over the survey period to examine the respondents awareness of the crisis of survival of humankind brought on by the deterioration of earths environment was “What is the perception of the severity of the threat to survival of humankind caused by environmental degradation”?

Figure 1 below shows the average time on the Environmental Doomsday Clock for each year since 1992. In the first year the average time for all respondents was 7:49 which fell in the “fairly concerned” quadrant. Since then, the needle on the clock advanced each year until 1996, when the average time first fell into the “extremely concerned” quadrant at 9:13, an advancement of one hour and 30 minutes in four years. Since then, the time has hovered in the early phases of the “extremely concerned” quadrant, at a little past nine o’clock, with the exception of the year 2000. In 2006, the needle advanced to 9:17 representing the highest sense of crisis since the survey began, the researchers said.

When comparing responses from Japan and abroad (Fig 2) the researchers found overseas respondents reported more advanced times on the doomsday clock until 1997; however, the differences have leveled since 1998 with respondents reporting similar times, with the exception of 2002 and 2003 when the average time for Japan moved further than the time from overseas respondents. Throughout the 15 years of the questionnaire, the needle on the environmental doomsday clock has never fallen in the “barely concerned” or “slightly concerned” quadrants.

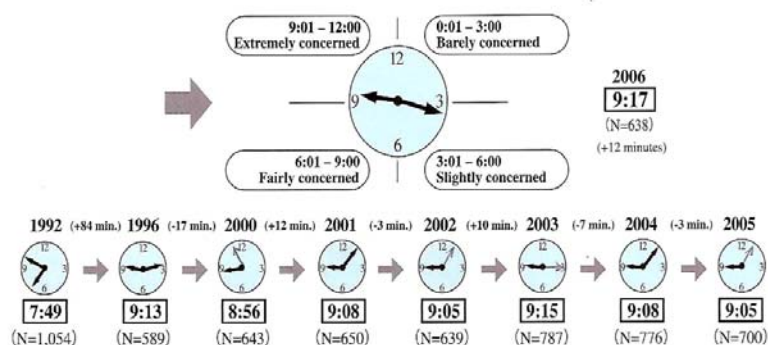


Figure 1: Changes in the Average Time on the Environmental Doomsday Clock (1992-2006)

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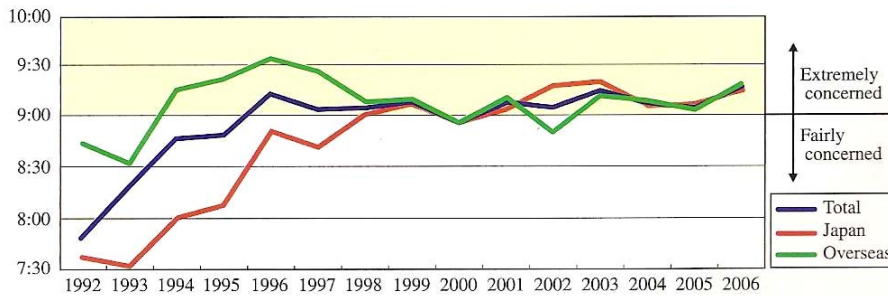


Figure 2: Changes for Japan and Overseas (1992-2006)

The above research finding clearly demonstrates that the opinion gathered from experts who are knowledgeable and are involved on environmental issues across the various regions of the world, have now come to one conclusion (Fig 2) and that is the world is facing serious environmental problems in particular, global warming.

In Figure 1, the doomsday clock is in the last quadrant which is the highest level of crisis concern.

The Asahi Glass Foundation says that for humankind to continue to prosper and develop, the realization of sustainable development has never been more necessary than today.

The result of this study is further evidence that supports the dangers of sea level rise repeatedly expressed by the atoll island countries of the Pacific

Fiji AgroMarketing Authority to facilitate marketing for farmers

By Vinesh Prasad
Fiji Ministry of Agriculture

The newly appointed board of Fiji Agriculture Marketing Authority (AMA) has pledged to improve the marketing network of agricultural produce in the country.

The Executive Chairman of AMA Ravindra Swamy believes farmers need better and efficient services in terms of marketing to get the maximum benefit from their hard labour.

“We need to encourage farmers to provide quantity and quality and that only can be achieved when markets are available.”

“Our focus is to link farmers to market in such a way that market is available at their door step”. Mr Swamy said.

However, Mr Swamy clarified that they are not in competition with local exporters or middlemen.

“We are merely facilitating the marketing of agro produce across the board including remote areas and outer islands.”

“We are currently buying root crops, honey and marine products from



Fiji made agro products ready for overseas markets (Fiji Agriculture Ministry pictures)

farmers and fishermen.”

He said AMA reaches the producers through its agents located in all localities who are not serviced by exporters and middlemen.

Mr Swamy further added that plans are underway with a leading distributor in the country to buy all

vegetables and make it available in all leading supermarkets.

“We are at the final stage of this deal and AMA is acting as a link between farmers and the buyer.”

He also said that it is one of their social obligations towards the farmers as

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Fiji AgroMarketing Authority to facilitate marketing for farmers...from

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a statutory arm of Government to provide services to rural areas and under privileged.

Mr Swamy believes that Fiji's agro-produce can be marketed using brand names similar to Fiji Water.



“We have to look at the bigger picture and selling our produce under brand names will present better benefits to the country.”

“Right now we need to increase our foreign exchange and one way to do that are to enhance our agro exports.”

Mr Swamy added that AMA will be working very closely with Agriculture Ministry's Research, Extension and quarantine Division to improve the quality of produce.

“We have plans to complement the activities of agro-processing companies by supplying them with the produce they need.”

Meanwhile, AMA has installed a refrigerator container on the East bank of Sigatoka River to assist farmers in maintaining the quality of their produce.

The reorganized AMA under the guidance of Agriculture Minister Jainend Kumar believes in facilitating and coordinating marketing to boost agriculture production.

Small livestock to be promoted

The National's Farming Today reports, Submitted by Nicks Maniha

A former chief livestock advisor with the Department of Agriculture and Livestock (DAL) has said that livestock needs to be given priority in agriculture strategic interventions.

Mr. Siva Supiramaniam said an important element of diversification is the inclusion of small livestock particularly pigs, goats, sheep, poultry, rabbits and honey bees which can provide comparatively rapid return on investment.

“For poor farmers with limited resources they give excellent opportunities for improving food security, dietary nutrition and increasing income in return for modest inputs”.

During a seminar presentation to DAL staff, Mr. Supiramaniam said that diversification is now an accepted strategy for agriculture development in poorer countries and forms a major component of the Special Programme for Food Security (SPFS) initiated by the Food and Agriculture Organisation (FAO).

Mr. Supiramaniam said his proposals are contained in a report which includes a plan of action for the livestock component for incorporation into the up-scaled SPFS program to achieve the overall goal of the programme.

The success of both the pilot and the expansion phases has prompted PNG to up-scale the SPFS into a national food security food security programme.

Mr. Supiramaniam said PNG has an abundance of natural resources suitable for livestock production and an enviable low disease risk status compared to its Asian neighbors. Despite this domestic production has not increased significantly in the recent past.

On the other hand, meat consumption is increasing steadily and is predicted to increase at a conservative rate of 5% per annum. The volume and cost of imported

meat and other animal products has increased significantly over the last five years, and at present exceeds K130 million.

He has suggested that more emphasis is needed to support the short cycle species of livestock such as pigs, goats, sheep, poultry, rabbits and honey bees.

The small-scale poultry production for live bird trade should also be assisted and promoted to enhance protein supply and create income earning opportunities.

Goat farming has become popular in some parts of the country and needs to be promoted widely for both milk and meat.

Goat milk is more digestible and hence more suitable for young children.

The potential of the apiculture (honey bee) industry is high and also needed to be promoted under the SPFS.

Mr. Supiramaniam said draught and pack animals should be promoted to enhance farm production and productivity and to improve market access in areas where transport facilities are not available. Households in remote areas are facing difficulties to market their agriculture produce due to poor transport.

Under such situations pack animals are of immense use.

In rural PNG pigs are a major potential source of meat in the local diets and can be promoted further. Other small livestock such as sheep, rabbits, guinea pigs and quails, should be promoted depending on physical constraints, resource availability and farmer preferences and capabilities.

Mr. Supiramaniam pointed out that some general constraints affecting small livestock development include lack of access to breeding stock, lack of animal husbandry skills, poor support services, high cost of imported feeds, lack of information, limited markets and low animal productivity due to inter-related caused of poor nutrition and management.

New publications

JOURNAL OF SOUTH PACIFIC AGRICULTURE

JOSPA Volume 12, Numbers 1 & 2, 2005

ISSN 1016 - 7774



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JOSPA Volume 12, Numbers 1 & 2, 2005

IRETA with the School of Agriculture and Food Technology has recently released the latest issue of their bi-annually produced journal on agriculture.

This is another interesting volume with relevant information to enhance and improve efforts towards development through the agriculture sector.

This new volume has published eight articles from topics on crops, vegetables as well as livestock. Authors of the journal are from around the region and their contribution is highly commended.

The journal is available in both hard copy and electronic formats. For more information write to uspireta@samoa.usp.ac.fj

IRETA's Publications Department will also soon release a A5 sized booklet referred to as an information toolkit on nursery management.

A publication arising out of the April held CTA/IRETA-SAFT regional workshop on nursery management in Vanuatu.

A simple styled and grammar publication intended for the use of farmers and other interested stakeholders.

Minister calls for agriculture development

Based on Gavamani Sivarai news

Submitted by Nicks Maniha

ALOPNG

PNG Minister for Agriculture and Livestock, Hon. Sasa Zibe has challenged the people of Central Province to make land available for agriculture development.

He said development projects such as the Mekeo Hinterland agro-forestry and integrated oil palm and jetropha project will create further investment opportunities.

The Minister made these remarks during the ground-breaking ceremony of the mekeo hinterland Oil Palm and jetropha project in Imounga village in the Kairiku District of the Central Province. He said the launching of the multi-million investment project has been initiated under the Tree and Industrial Crops Development Priority of the national Agriculture development Plan (NADP).

Mr Zipe encouraged the landowners, developers and the government to continue working together for the success of this economic investment project.

The minister also called for further strengthening of linkages with other commodity agencies and stakeholder partners to develop meaningful agriculture in the Central Province.

He said public and private sector investment in the agriculture sector is poor and stagnant and is performing at a sluggish pace. "The government's economic policies and public investments in the past two decades have been biased towards the development of non-renewable resources sector concentrating on mining and petroleum at the expense of the agriculture, forestry and fisheries," he said. He said due to low investment and poor financial support, poverty is still wide spread in PNG, especially in rural areas and squatter settlements in the urban centres.

"Food shortages are now common in areas with high population densities and land pressure and areas prone to unusual climate conditions and natural calamities such as drought, floods, cyclone and volcanic episodes," the Minister said. He said the Department of Agriculture and Livestock would ensure all farmers are resourced with high yielding planting materials, resistant to pests to have continuous access to improved socio-economic conditions through sustainable agriculture farming systems to enhance income-earning opportunities.

Mr. Zibe said the current government had made substantial investment to the agriculture sector and that is oriented towards economic development targeting rural areas.

"Investment in broad-base sustainable commercial agriculture using nucleus estate and out-grower development models is an appropriate option as it offers opportunities for employment and income base for the rural people," the minister said. The Department of Agriculture and Livestock has undertaken a number of policy initiatives such as PNG National Food Security 2000-2010 and the PNG Rice Development Policy, 2004-2014 to address poverty and food insecurity.

He said it had recently finalized the formulation of the national Agriculture Development Plan. The Plan is a significant government initiative and a step in the right direction to attract investment to the agriculture sector.

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