## FAO official draws attention to food security challenges

A major challenge for the Caribbean region is the high food import bill, and an official from the Food and Agriculture Organisation (FAO) of the United Nations is suggesting that work has to be done to get the figure down substantially.

Moreover Dr. J.R. Deep Ford, Co-ordinator, Caribbean Sub-Region, FAO, noted that efforts must be made to cut down on the amount of food that is wasted.

For more information see page 7

## AGRICULTURE IN THE NEWS

AGRICULTURE IN THE NEWS is a monthly newsletter which provides a compilation of selected news articles on issues affecting agriculture in the Caribbean region. Articles from Newspapers, Online News Service Agencies, Newsletters and Press Releases are featured.

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Our Vision

To be the centre of excellence in the Caribbean for the provision and application of research and development in agriculture and rural enhancement.

Our Mission

To contribute to the sustainable economic well being of Caribbean people by the generation and transfer of appropriate technology through research and development within the agricultural value chain.

www.cardi.org
Sweet Potato

CIP to develop enhanced sweet potatoes by Kelly Njombo. Zambia Daily Mail, 6 August, 2013
http://www.daily-mail.co.zm/business/19616

Full Article

THE International Potato Centre (CIP) plans to develop sustainable farming practices of pro-vitamin A sweet potatoes in the country to increase food availability.

CIP is a non-profit international agricultural research organisation with a global mandate to conduct research on potatoes, sweet potatoes, Andean root and tuber crops and sustainable management of natural resources.

The project will consist of field-based research to promote and adopt pro-vitamin A sweet potatoes in several districts in the country.

“CIP plans to develop sustainable farming practices of pro-vitamin A sweet potato in Zambia and to promote the adoption and utilisation of the commodity in several districts,” reads the statement. This is according to a statement availed to the Daily Mail in Lusaka last week.

CIP is currently scaling up its research efforts and development impacts in Africa and Asia in an effort to reach 15 million households with orange-fleshed sweet potato (OFSP) by 2020.

The project will contribute to reducing poverty levels in the country and also give people the opportunity to lead a healthy and productive life.

“Pro-vitamin A will help eradicate poverty, help countries to develop and prosper, and give every human being the opportunity to lead a healthy and productive life by ensuring the right to a safe, nutritious, and sufficient food supply,” reads the statement.

CIP and its partners have revealed that this new food is acceptable in traditional diets and that only one-half cup of OFSP provides the Vitamin-A requirement for a single child.

Over the past 15 years, the organisation has helped build robust evidence to demonstrate that pro-vitamin A rich, OFSP can fight vitamin A deficiency in children.

Banana

St Vincent and the Grenadines: Banana farmers 'abandoning fields' by the BBC, 6 August, 2013

Full Article

Caribbean banana farmers are abandoning fields where crops have been ravaged by disease, it seems.

And it's apparently making the problem worse. Black Sigatoka has affected several countries in the region, including Dominica, St. Lucia, Grenada and Guyana, prompting the UN's Food and
Agriculture Organization to step in to support farmers. But in St Vincent and the Grenadines, ministers say efforts to eradicate the disease by cutting back crops with the tell-tale blackened leaves are being hampered by some farmers failing to replant with disease-free varieties or alternative crops, reports the Caribbean Media Corporation news agency.

It quotes Agriculture Minister Saboto Caesar as saying: "We are seeing the re-growth of the (affected) bananas in those areas... It is providing the perfect environment for Black Sigatoka." The government is ploughing £800,000 of EU aid into tackling the problem, he adds. Black Sigatoka arrived in the Caribbean in 1991 and has since spread, reportedly reducing the value of exports from St Vincent and the Grenadines by 90%. The banana industry is the biggest sector of the agricultural economy in a nation plagued by high unemployment.

Germplasm - Agricultural Biodiversity

http://www.bioversityinternational.org/announcements/press_release_global_leaders_launch_initiative_to_bridge_conservation_and_agriculture.html

Full Article

23 July 2013, Rome
A year ago, global leaders met in Rio de Janeiro to shape the future of sustainable development. Ensuring food security and sustainable agriculture was a cornerstone of those global discussions. As the world faces ongoing food crises, extreme weather and population growth, Bioversity International and global partners are responding by launching an initiative to develop solutions to food security and shape the Sustainable Development Goals.

The ‘Bridging Agriculture and Conservation Initiative’ which has been symbolically launched in Rio, will provide evidence-based solutions to feed a growing population, while ensuring long-term conservation of vital biodiversity, including agricultural biodiversity. Agricultural biodiversity – the diversity of varieties and species of plants on farms and in the wild – can help farmers manage risks, such as threats from pests and diseases, climate change and market fluctuations; improve income, livelihood and nutrition; and ensure the availability of important genes and traits for current and future food security and continued evolution and adaptation.

Bioversity International launched this initiative because the current approaches to food security, which focus primarily on increasing agricultural productivity of a few major crops, will not lead to better nutrition and more resilient, nutrition, adaptable and ultimately more productive food and agricultural systems in the future. Likewise, the current approaches to conservation, which focus primarily on conserving biodiversity in a limited number of geographic locations, do not include agricultural landscapes and ecosystems.

For first time, the agriculture and conservation sectors are coming together to find solutions to these issues together, says M. Ann Tutwiler, incoming Director General of Bioversity International. “The trade-offs between food security and conservation are often presumed to be too big and too expensive. The goal of the Bridging Agriculture and Conservation Initiative will bring together an international and interdisciplinary team of scientists to find the synergies and provide science-based solutions
integrating biodiversity conservation and food security together. We need new solutions to these dual challenges,” she says.

But, finding new solutions does not guarantee they will be adopted. So, the initiative also brings together world-class global agriculture, development and conservation scientists to identify these new solutions. Global leaders from more than 16 organizations have committed to finding, communicating and advocating for new solutions that are built on science, evidence and experience.

The attached declaration (55 KB) is the first step in this two-year initiative. The initiative was established with the support of a founding donation from The Christensen Fund.

Declaration: Bridging Agriculture and Conservation, 12 July 2013, Rio de Janeiro, Brazil. Dated 1 August 2013 http://www.bioversityinternational.org/fileadmin/bioversityDocs/Announcements/Agriculture_Conservation_Final_Declaration_03.pdf

Biotechnology


Full Article

You want fries with that?

Two brave volunteers yesterday got a taste of the world’s rarest hamburger, a lab-created, stem-cell prototype that you won’t find on any dollar menu.

Researchers in the Netherlands developed the first-ever “in vitro burger” with the hope that such meats could help feed the world and fight climate change.

Now if they could only make it taste good.

“I would say it’s close to meat,” said Austrian nutritionist Hanni Ruetzler, one of the volunteers who tasted the Frankenburger at its unveiling in London.

“I miss the salt and pepper.”
Meat lovers might miss the sizzle on the grill, since this patty has little of the fat of a Five Guys feast.

“It’s a leanness to it,” said the second taster, Josh Schonwald, a Chicago-based journalist who shunned the bun and all the trimmings to concentrate on the beef. “But the bite feels like a conventional hamburger.”

The taste test, which came after five years of research, is a key step toward making lab meat a culinary phenomenon, said Mark Post, whose team at Maastricht University developed the burger.

Post and his university colleagues made the meat from the muscle cells of two organic cows.
Scientists said the cells were extracted during a painless biopsy.

The cells were put into a nutrient solution to help them develop into muscle tissue, growing into small strands of meat. It took nearly 20,000 strands to make a single 5-ounce patty.

The $330,000 stem-cell project was funded by Google founder Sergey Brin, who expressed concerns about the meat industry’s treatment of animals.

“When you see how these cows are treated, it’s certainly something I’m not comfortable with,” he said.

The initiative also has the endorsement of PETA.

“As long as there’s anybody who’s willing to kill a chicken, a cow or a pig to make their meal, we are all for this,” said Ingrid Newkirk, the president of the animal-rights group.

“Instead of the millions and billions being slaughtered now, we could just clone a few cells to make burgers or chops.”

The burger was seasoned with salt, egg powder, breadcrumbs, red beet juice and saffron. It was cooked in oil and butter.

Post said it was crucial that the burger “look, feel and taste like the real thing.”

The Food and Agriculture Organization predicts global meat consumption will double by 2050 as more people in developing countries can afford it.

Raising animals destined for the dinner table takes up about 70 percent of all agricultural land.

Stem-cell meat is unlikely to hit store shelves for another 20 years. It would take that long to refine the technology, encourage other producers and scientists to get involved, and overcome any regulatory issues, experts said.

The Dutch researchers said the same techniques could be used to reproduce just about any meat.

For now, the process is limited to processed meat because it is the easiest kind to replicate. Processed, or minced, meat accounts for about half of the meat market.

Post said it should be possible to make more complicated cuts in the future but it would involve more advanced tissue-engineering techniques.

He said it might be possible to make a steak in about 20 years.
Climate Change

Helping countries reduce agricultural greenhouse gas emissions: New FAO guidance on how agricultural development planning can help tackle causes of global warming by the FAO, 6 August, 2013

Full Article

6 August 2013, Rome - With the consequences of climate change for the world's food production systems becoming increasingly clear, more needs to be done to capitalize on agriculture's potential to mitigate global warming, says a new FAO guidance document published today.

Agriculture is directly responsible for over 10 percent of all human-caused greenhouse gas (GHG) emissions, FAO figures show. But improved farming practices offer the possibility of reducing those emissions and sequestering atmospheric carbon, while at the same time increasing the resilience of production systems, says the document, National planning for GHG mitigation in agriculture, published by FAO's Mitigation of Climate Change in Agriculture Programme (MICCA).

Yet progress in drawing up agricultural GHG mitigation plans — as well as in allocating financing to climate change projects in the agriculture sector — is falling short of what is needed, cautions FAO.

The Organization's new guidance document aims to help address these shortfalls by providing step-wise advice and examples of national planning for GHG mitigation in food production systems, as well as highlighting opportunities for developing countries to secure climate financing for agriculture.

Examples from existing mitigation planning processes in developing countries illustrate options for addressing key planning elements in country-specific ways, and approaches to involving smallholder farmers in the planning process are highlighted as well.

Key steps, guiding principles

Although opportunities and planning processes will vary from country to country based on local circumstances, a number of general principals hold true, FAO says.

First, mitigation actions in agriculture should be pursued within the context supporting agricultural development and food security, with planners clarifying from the start how mitigation can contribute to national development goals.

Participatory planning and cross-sectoral cooperation will be important to the success of mitigation plans, the report adds. Farmers and other stakeholders should be involved in setting objectives, actions and targets, both to generate support for and to improve the effectiveness of planned policies.

To access international and domestic financing, plans should be very specific regarding how to assess the mitigation potential of proposed policies and measures. Sound systems for measuring the impacts of policies and reporting other performance metrics are also necessary when seeking financing for projects.

Another key step is to identify the barriers that impede adoption of mitigation practices by farmers. Many agricultural practices that can mitigate climate change are already widely known — effective
policies need to identify why farmers may not be adapting them, work to remove barriers, and facilitate their wider use.

Also crucial: determining how mitigation policies and measures will be financed.

Some countries are supporting agricultural mitigation activities primarily through domestic fiscal budget lines and policies that leverage private investment, the report notes. For many countries, however, an important goal of mitigation planning is to attract international financial support, in order to match the priorities of international climate finance institutions to specific parts of domestic mitigation plans.

UCI-led team develops more accurate model of climate change’s effect on soil. UCI News, University of California, Irvine, 1 August 2013

Full Article

It accounts for how in-ground carbon is affected by bacteria and fungi

Irvine, Calif., Aug. 1, 2013 — Scientists from UC Irvine and the National Center for Atmospheric Research have developed a new computer model to measure global warming’s effect on soil worldwide that accounts for how bacteria and fungi in soil control carbon.

They found that soil outcomes based on their microbial model were more reliable than those forecast by traditional models. Study results appear online in Nature Climate Change.

While standard models project modest carbon losses with global warming, the microbial models generate two novel scenarios: One is that soil around the world will accumulate carbon if microbial growth declines with higher temperatures. The second assumes that microbial growth increases with global warming, resulting in large soil carbon losses, meaning much more carbon will be released into the atmosphere.

“The microbial soil model is extremely important to understanding the balance of carbon in the soil versus the atmosphere and how carbon mass in soil is affected by these bacteria and fungi,” said the study’s senior author, Steven Allison, an associate professor of ecology & evolutionary biology and Earth system science at UC Irvine. “Our hope is that this new soil model will be applied to the global Earth system models to better predict overall climate change.”

The researchers also discovered that in cases of increased carbon input to soil (such as carbon dioxide or nutrient fertilization), microbes actually released the added carbon to the atmosphere, while traditional models indicate storage of the additional carbon. This, they said, is further evidence that the Earth system models should incorporate microbial impact on soil to more accurately project climate change ramifications.

“In our microbial model, we directly simulate how the activity of organisms like bacteria and fungi control the storage and losses of soil carbon,” said Will Wieder, a postdoctoral scientist with the
National Center for Atmospheric Research in Boulder, Colo. “Now that we can more accurately measure what happens to soil as temperatures increase, we hope to study the potential effects of soil carbon fluctuations within a changing environment.”

Gordon Bonan of the National Center for Atmospheric Research also contributed to the study, which was supported by National Science Foundation grants AGS-1020767 and EF-0928388 and the U.S. Department of Energy.

Food Security

FAO official draws attention to food security challenges by the Barbados Advocate, 8 August, 2013

Full Article

A major challenge for the Caribbean region is the high food import bill, and an official from the Food and Agriculture Organisation (FAO) of the United Nations is suggesting that work has to be done to get the figure down substantially.

Moreover Dr. J.R. Deep Ford, Co-ordinator, Caribbean Sub-Region, FAO, noted that efforts must be made to cut down on the amount of food that is wasted. He made the remarks while speaking at the opening of the National Seminar on Food and Nutrition Security in Barbados, at the University of the West Indies, Cave Hill Campus, yesterday morning.

“We often think of food security and we think of production and we must; but we must also think of the waste in our society. According to estimates at FAO, one third of the food produced for human consumption is wasted; 1.3 billion tonnes per year either lost as part of post-harvest losses or wasted in preparation, in distribution, in the restaurants, in the hotels, in the kitchens of our homes, at the dining tables when we are eating with our families,” he said.

Ford maintained that if the issue of wastage is addressed, significant progress can be made as it relates to the issue of food security.

Referring to the region’s high food import bill, the FAO official said that efforts must be made to scale up activities not only behind the farm gate, but beyond the farm gate. Ford said that product development is an area that needs to be worked on more, as little is done to move local products beyond the cottage industries.

“The food import bill has been referred to – $4 billion plus, the $4 billion figure is a 2008 figure, which of course was inflated by the high prices of that particular year. There was some decline in 2009 and 2010, but it has returned to that very high level… But the challenge is very clear, we have persons in this country who are making muffins from breadfruit and supplying them for breakfast, but almost nobody knows about that, and very few people know that you can make 100 per cent breadfruit flour,” he lamented.

He made the point, as he noted that the fastest growing aspect of the food import bill is processed foods, but he said that the region has a culture of not appreciating and using domestic products. (JRT)
Estwick speaks on agriculture by the Barbados Advocate, 8 August, 2013

Full Article

A Cabinet Minister said that he is excited about the possibilities for renewed investment in food and agricultural science.

Minister of Agriculture, Food, Fisheries and Water Resource Management, Dr. David Estwick told those at the opening of the National Seminar on Food and Nutrition Security in Barbados yesterday morning, that young people must be encouraged to become agricultural entrepreneurs and he said, it is also imperative that the needs of small holder farmers be addressed.

“They need to be encouraged in the elaboration and implementation of the national plan for food and nutrition security, so that they can better participate in new potential investments. Perhaps the key to unleashing the full potential of our small holder farmers is the establishment of food production zones at specific locations around the country that we are actively engaging in, and we are looking to make sure that these food production zones are going to be community driven,” he said.

The Minister’s remarks came as he maintained that Government’s vision is that all members of the Barbadian society permanently enjoy their right to adequate food and empower themselves with sufficient resources to make sound food choices, which lead to a healthy and active lifestyle. His comments came as he noted that the fight against hunger and nutrition is a global challenge and he said that in 2009, the Food and Agriculture Organisa-tion reported that one in every four individuals was undernourished in the Caribbean.

“Here in Barbados there is a general consensus of the need for systemic approaches or strategies for ensuring adequate levels of national and household food and nutrition security. It is against this background that our food and nutrition security policy has been drafted.”

Dr. Estwick continued, “Additionally, our awareness has been made even greater by our rapid dietary and epidemiological transitions. In terms of our dietary transitions nutritionists have observed a shift from diets based on indigenous staples, local fruits, vegetables and legumes to a more energy dense diet, based on more processed foods as well as beverages with high sugar, fat, salt and alcohol content.”

To that end, the agriculture minister indicated that chronic non-communicable diseases such as diabetes, heart disease, hypertension and cancer have replaced malnutrition and infectious disease as major public health concerns. (JRT)
Recession brings renewed investment in agriculture by Melissa Rollock, Barbados Government Information Service, 8 August, 2013

Full Article

The economic downturn has facilitated increased investment in agriculture as the engine for economic growth in both the public and private sectors.

So says Minister of Agriculture, Food, Fisheries and Water Resource Management, Dr. David Estwick. He was speaking at the opening of a two-day National Seminar on Food and Nutrition Security yesterday, at the University of the West Indies, Cave Hill Campus.

Addressing an audience that included representatives from the Organization of American States, the Food and Agriculture Organization of the United Nations and the Inter-American Institute for Cooperation on Agriculture, Dr. Estwick said: “…It involves not only increased Government spending on agriculture and infrastructure for inputs and marketing but also encourages private sector investment [which] includes foreign direct investment in food production, post-harvest storage, processing and marketing…

“I am excited about the possibilities for renewed investment in food and agricultural science, technology and knowledge development and transfer.”

The Agriculture Minister explained that the sector needed to influence and attract more young people to become agricultural entrepreneurs, and added that the needs of “small holder” farmers also had to be addressed. He submitted that these farmers should be encouraged to be a part of the implementation of the draft Food and Nutrition Security Policy and Action Plan, which was being finalised during the seminar, so that they could better participate in new potential investments.

“Perhaps the key for unleashing the full potential of our small holder farming is the establishment of Food Zones at specific locations around the island. This initiative would be community driven.

“I would like to reiterate my Government’s vision that all members of the Barbadian society permanently enjoy their right to adequate food and to be permanently empowered with sufficient resources to make sound food choices that lead to a healthy lifestyle,” Dr. Estwick emphasised.
A scarcity of arable land, diminished spending power due to the global recession and soaring world food prices, all pose a threat to Barbados’ food and nutrition security.

Minister of Health, John Boyce, made this assertion yesterday, during a two-day National Seminar on Food and Nutrition Security in Barbados at the University of the West Indies, Cave Hill Campus. The aim of the seminar was to finalise the draft Barbados Food and Nutrition Security Policy and Action Plan.

Mr. Boyce said that while the country needed to guard against these threats, the challenge Barbados faced was more related to poor food choices which directly contributed to the epidemic of chronic non-communicable diseases.

The Health Minister explained that Barbados, like other Caribbean countries, was experiencing a shift in nutritional patterns resulting in increased rates of obesity.

“Within this global economic climate, there has been a worrying trend where more and more people do not have access to safe and nutritious foods to meet their dietary needs for daily living. This is further exacerbated by human habits with respect to our taste preferences. In this regard, I refer especially to the acknowledged over indulgence in the use of both sugar and salt. Our task therefore, includes vigilance and the promotion of a continuous educational thrust to guide our people in exercising healthier eating choices.

“Food Security is a complex sustainable development issue, linked not only to health, but also to sustainable economic development, the environment and trade. Such issues as to whether households get enough food, how that food is distributed within the household and whether or not it fulfills the nutritional needs of all members of the household, show that food security is linked to health,” Mr. Boyce posited.

As a result of this, he called for greater collaboration among academia, the private sector and civil society to tackle the problem.

Mr. Boyce pointed out that the Food Security and Nutrition Policy and Action Plan, which was presented during the seminar, was based on the regional policy adopted by Member States of the Caribbean Community in 2010. The policy draws on stakeholders from agriculture, finance, social care and health.

He said the Ministry of Health was committed to the development and eventually the implementation of the policy.

“The Ministry is forging ahead and taking effective action so that individuals have the option to the right choices to ensure healthy living and wellness. This continued focus will be one of the many ways we seek to reduce the high rate of obesity and the incidence of chronic non-communicable diseases in this country,” the Health Minister stated.
Existing cropland could feed 4 billion more. University of Minnesota, 1 August 2013  

Full Article

New University of Minnesota research shows reallocating croplands away from fuels and animal feed could boost food available for people by 70 percent without clearing more land

Contacts: Mary Hoff, Institute on the Environment, maryhoff@umn.edu, (612) 626-2670  
Brooke Dillon, University News Service, bldillon@umn.edu, (612) 624-2801

MINNEAPOLIS / ST. PAUL (08/01/2013) —The world’s croplands could feed 4 billion more people than they do now just by shifting from producing animal feed and biofuels to producing exclusively food for human consumption, according to new research from the Institute on the Environment at the University of Minnesota.

Even a smaller, partial shift from crop-intensive livestock such as feedlot beef to food animals such as chicken or pork could increase agricultural efficiency and provide food for millions, the study says.

"We essentially have uncovered an astoundingly abundant supply of food for a hungry world, hidden in plain sight in the farmlands we already cultivate," says graduate research assistant Emily Cassidy, lead author of the paper published in Environmental Research Letters. "Depending on the extent to which farmers and consumers are willing to change current practices, existing croplands could feed millions or even billions more people."

Demand for crops is expected to double by 2050 as population grows and increasing affluence boosts meat consumption. Meat takes a particularly big toll on food security because it takes up to 30 crop calories to produce a single calorie of meat. In addition, crops are increasingly being used for biofuels rather than food production. This study sought to quantify the benefit to food security that would accrue if some or all of the lands used to produce animal feed and fuel were reallocated to directly produce food for people.

To get at that question, Cassidy and colleagues first mapped the extent and productivity of 41 major crops between 1997 and 2003, adjusting numbers for imports and exports and calculating conversion efficiencies of animal feed using U.S. Department of Agriculture data. The researchers assumed humans need an average of 2,700 calories per day, and grazing lands and animals were not included in the study. Among the team’s findings:

- Only 12 percent of crop calories used for animal feed end up as calories consumed by humans.  
- Only 55 percent of crop calories worldwide directly nourish people.  
- Growing food exclusively for direct human consumption could boost available food calories up to 70 percent  
- U.S. agriculture alone could feed an additional 1 billion people by shifting crop calories to direct human consumption.  
- When calculated on the basis of protein rather than calories, results were similar. For instance, of all plant protein produced, 49 percent ends up in human diets.

In addition to the global findings, the research team looked at allocation of crop calories in four key countries: India, China, Brazil and the U.S. They found that while India allocates 90 percent of
calories to feeding people, the other three allocate 58 percent, 45 percent, and 27 percent, respectively.

Noting the major cultural and economic dimensions involved, the researchers acknowledged that while a complete shift from animal to plant-based diets may not be feasible, even a partial shift would benefit food security. Quantifying the impact of various strategies, they found that a shift from crop-intensive beef to pork and chicken could feed an additional 357 million people, and a shift to nonmeat diets that include eggs and milk could feed an additional 815 million people.

The researchers emphasized that they are not making diet prescriptions or recommendations, just pointing out opportunities for gains in food production. They noted that humans can completely meet protein needs with plant-based diets, but that crop systems would need to shift (e.g., toward more production of protein-rich legumes) to meet human dietary needs.

"The good news is that we already produce enough calories to feed a few billion more people," Cassidy says. "As our planet gets more crowded or we experience disasters like droughts and pests, we can find ways of using existing croplands more efficiently."

In addition to her role as Global Landscapes Initiative graduate research assistant with the Institute on the Environment, Cassidy is a graduate student in the Natural Resources Science and Management program in the University of Minnesota's College of Food, Agriculture and Natural Resource Sciences.

FAO Food Price Index falls for the third consecutive month by the FAO, 8 August, 2013

Full Article

» The FAO Food Price Index averaged 205.9 points in July 2013, 4 points (nearly 2 percent) below its revised value for June and 7 points (or 3.3 percent) lower than in July 2012. The decline in July, which marked the third consecutive monthly drop, was largely driven by lower international prices for grains, soy and palm oil while sugar, meat and dairy quotations were also down from the previous month.

» The FAO Cereal Price Index averaged 227.7 points in July, down 8.8 points (3.7 percent) from June and as much as 33 points (or nearly 13 percent) below July last year. The sharp decline mostly reflected falling maize prices as favourable weather boosted hopes of a significant production increase in several leading maize producing countries. Wheat prices also fell but the strong pace of exports limited the decline. Rice price changes varied according to origins, with a decrease in Thai prices contrasting with higher Vietnamese quotations.

» The FAO Oils/Fats Price Index averaged 191 points in July, down by 7 points (or 3.3 percent) from June and the lowest level in three years. The slide in the index mainly reflects easing quotations for both soy and palm oil. Soy oil values have fallen in response to ample export availabilities, especially in Argentina, combined with weak demand (including from the biodiesel sector), as well as good soybean crop prospects in the United States. The palm oil price weakness mainly resulted from the combination of ample production and lower than expected import demand, most notably by China. Prices for rape and sunflowerseed oil also fell, reflecting improved 2013/14 crop prospects.
» The FAO Dairy Price Index averaged 236.3 points in July, a fall of 2.6 points (1.1 percent). While prices fell overall, the decline was by a smaller margin than in the previous two months as a result of tightening availabilities in Oceania and stagnating milk production amongst other exporters, principally in Europe, South America and the United States. Milk powder prices were underpinned by limited supplies but the increase was more than offset by a fall in cheese prices due to reduced import demand.

» The FAO Meat Price Index averaged 173.3 points in July, more or less unchanged from the revised June level. Prices for poultry and pig meat were lower, while those of bovine and ovine meat rose. Overall, there are signs that international prices for meat are weakening in the face of reduced import demand – especially from Asian countries – reflecting production growth and, in some cases, a build-up of domestically produced meat inventories.

» The FAO Sugar Price Index averaged 239 points in July, down 3.6 points (1.5 percent) from June. Sugar prices declined for the fourth consecutive month in July, on the back of anticipated large surplus production in major producing areas, notably in Brazil, the world’s largest sugar producer and exporter. Declining ethanol prices in Brazil also provided an incentive to convert more sugarcane into sugar instead of ethanol, which put additional downward pressure on international sugar prices.

Agricultural Development

The future of farming, part 1: controlling the environment by Ned Madden, TechNewsWorld, 6 August 2013

Excerpt

"We're in the midst of a global movement, and the demand for locally grown, organic produce has never been stronger," said Greengro Technologies CEO James Haas, "but the biggest problem is that in our society in the U.S., everybody stopped doing basic food-security things -- like, for example, collecting seeds. ... "Urban growers have to take personal responsibility for what they grow and eat."

Famine... or feast? Soil... or hydroponics, aquaponics, aquaculture or aeroponics?

Nine billion hungry human beings will be living on planet Earth by 2050, according to United Nations estimates.

"We will need to produce more food in the first half of this century than we did in the previous 100 centuries combined," declared Tony Kajewski, an engineering manager at John Deere and president of the American Society of Agricultural and Biological Engineers.

Along with an increasing population, the world faces climate change, rising fossil fuel prices, ecosystem degradation, and water and land scarcity -- all of which are making today's food production methods increasingly unsustainable, according to "Latest Agricultural Technology Innovation," a November 2012 report from Kachan & Co.
There's an upside to all this flux and food insecurity, however. The need for solutions is driving important new agricultural innovations -- in particular, urban agriculture and indoor cultivation.

Farming has migrated from the fields to the cities and moved into the developed environment.

**Urban Agriculture and CEA**

Urban agriculture involves growing plants and raising animals within and around cities. Urban agriculture means food production in densely populated areas, and it features many types of production systems, including traditional open gardens, protected environments and hydroponic greenhouses.

Indoor farming goes by many names: "all-season farming," "undercover agronomy," "commercial indoor cultivation" and "controlled environment agriculture," or CEA, to name a few. Entrepreneurial types are converting unused factories, warehouses, office buildings and other facilities into urban farms. Many are building new glasshouse greenhouses for that superior mix of natural sunlight and the powerful artificial lights favored in grow rooms.

Urban agriculture offers a promising path toward the goal of feeding the planet's growing -- and increasingly urban -- population. Many of the tools to make that path viable come from CEA.

CEA involves a combination of engineering, plant science and computer-managed facility control technologies used to optimize plant growing systems, plant quality and production efficiency.

In addition to indoor crop farming, CEA is used in research at universities and corporate laboratories. It is useful for isolating specific environmental variables for closer study. For example, researchers may study photosynthesis by comparing a crop grown with induction lighting vs. one grown with LEDs. The advantage is that all other factors can be kept constant, reducing the incidence of another influence on the experiment.

CEA has celestial applications as well. NASA pioneered "astroculture" by flying a plant growth facility on nine Space Shuttle missions, including one in 1995 in which potatoes were grown in weightlessness. Some of the research on the International Space Station anticipates traveling beyond low-Earth orbit, focusing on meeting the needs of a long-term spaceflight to Mars, for example. A group of engineers at NASA's Kennedy Space Center in Florida are developing an ISS plant habitat with a large growth chamber to learn the effects of long-duration microgravity exposure to plants in space.

CEA is "an integrated science- and engineering-based approach to provide specific environments for plant productivity while optimizing resources including water, energy, space, capital and labor," according to Gene A. Giacomelli, PhD, director of the Controlled Environment Agriculture Center and a professor in the Department of Agriculture and Biosystems Engineering at the University of Arizona. .....
Agriculture Ministry implementing measures to boost dairy industry. Jamaican Information Service, 5 August, 2013  

**Full Article**

The Food and Agriculture Organization (FAO) has approved a US$7 million technical agreement grant to support a five-year development plan for the local dairy sector.

Agriculture and Fisheries Minister, Hon. Roger Clarke informed that the five-year plan will include improvement in breed and pasture management. It is among a number of initiatives to resuscitate the country’s dairy industry.

Mr. Clarke made the announcement, while addressing Sunday’s (August 4) opening of the 61st Denbigh Agricultural, Industrial and Food Show at the Denbigh Showground in May Pen, Clarendon.

Among the initiatives to revitalise the industry is the offer of concessionary loans to dairy farmers for animal acquisition and path to development plan. The loans are available at an interest rate of five per cent; with a loan ceiling of $2.5 million to individuals, and $5 million for corporate entities.

The Agriculture Minister informed that to date, 53 individual farmers and corporate entities have taken up loans totaling $84.5 million.

The reintroduction of a herd recording programme to assist dairy farmers in making objective management decisions, is also part of efforts to improve the sector. The programme aims to aid the genetic evaluation of local dairy cattle to enable the identification of animals with high yielding potential.

Mr. Clarke further informed that the Ministry has purchased and leased to farmers, with the option to purchase, five four-edge choppers with the objective to improve the efficiency of the use of harvested fodder.

He said the Ministry will also provide assistance to farmers to alleviate the adverse impact of recent drought conditions, making available to farmers high yielding and nutritive fodder species to enhance milk production.

“We will also be embarking on a collaborative effort with research and development in making conserve fodder available to dairy farmers in areas prone to drought to mitigate the adverse impact of the drought on animal production and productivity,” he stated.

Meanwhile, Minister Clarke commended the Jamaica Dairy Development Board for its hard work and dedication and its continued efforts to revive the industry.

“I am very pleased that we are beginning to see renewed interest in beef cattle production. In fact, there has been a slight increase in beef production, up from 2010 to 2012,” he remarked.

He noted that it was also essential to address the issue of nutrition, both of dairy and beef cattle in a targeted and coordinated manner.

To this end, he said the Ministry is developing and implementing an action plan to increase silage and hay production.
“The availability of cattle feed on a year round basis and especially in times of drought is essential to maximise the nutrition of the animals and their ability to produce the desired levels of milk and meat,” Mr. Clarke said.

“We are going to grow grass like we are growing crops, so that you can reap it and store it. So that when dry weather comes you don’t have to go and buy bag feed. You can get local, indigenous feeds to feed your animals to make you more competitive,” he added.

He informed that through the Agro-parks programme, the Minister is in the process of planting sorghum and increasing the production of hay to ensure that locally produced cattle feed is consistently available.

The Ministry is also in the process of initiating a cattle surveillance pilot project to reduce the impact of cattle theft.

Caribbean Week of Agriculture to celebrate youth and gender. CTA, 6 August, 2013

Full Article

Caribbean Week of Agriculture to celebrate youth and gender

Celebrating youth and gender in Caribbean agriculture under the theme "Each endeavouring, all achieving," will be the main focus of the 11th Caribbean Week of Agriculture (CWA) to be held in Antigua and Barbuda during 12 -20 October 2012. The CWA is unique not only in the Caribbean but also in other ACP regions, as it provides a regular space for dialogue between the agricultural community and the highest level of policy representatives from across the region.

As the flagship agricultural annual event in the Caribbean, the CWA brings all major stakeholders and decision-makers in policy and practice to analyse and discuss the region's most pressing issues in agricultural development. Inputs to the dialogue originate from stakeholders and technical workshops. The event was first inaugurated by Inter-American Institute for Cooperation on Agriculture (IICA) and the Caribbean Community (CARICOM) Secretariat in 1998. Since 2003, CTA has been a major partner and sponsor of CWA activities.

At CWA 2012, CTA and partners will organise and manage workshops whose results will inform policy dialogues during and after the event. As part of these activities, CTA will contribute to knowledge sharing and policy dialogue on youth and rural modernisation - one of the emerging pillars of the Caribbean Common Agricultural Policy.

In addition, CTA will co-organise a consultation on ICTs and value chains. CTA will also support a workshop on the development of regional policies for climate smart agriculture in the Caribbean and this event, and other key events, will be will used to facilitate knowledge sharing between the ACP regions. A media science workshop will be another key activity supported by CTA.

A CTA's Delegation, headed by Mr Michael Hailu, Director, will participate in the week's activities.
**Intellectual Property**

**Managing CGIAR intellectual assets for the benefit of smallholder farmers.** CGIAR Consortium News, 1 August 2013

**Full Article**

Back in March 2012 the CGIAR Principles on the Management of Intellectual Assets (the “IA Principles”) were approved and adopted, formalizing a set of principles to govern the use of Intellectual Assets. These IA Principles were the result of a long period of drafting and negotiation – and represented a significant milestone in the CGIAR reform process.

Recently another important document was approved by the Consortium Board; the ‘Implementation Guidelines’ for the CGIAR Principles on the Management of Intellectual Assets which complement the IA Principles. The additional information and illustrations are aimed at facilitating a better understanding of the CGIAR IA Principles and will guide their interpretation and coherent implementation across the CGIAR Consortium. The IA Implementation Guidelines apply to all 15 member Centers of the Consortium, in particular the research activities carried out to implement the Strategy and Results Framework.

The ‘intellectual assets’ produced or acquired by Centers are the focus of both the IA Implementation Guidelines and the IA Principles. This means the results and/or products of research and development activities produced (or acquired) by Centers including; knowledge, publications, and other information products, databases, improved germplasm, technologies, inventions, know-how, processes, software and distinctive signs, whether or not they are protected by intellectual property rights.

Why do we need principles and guidelines about Intellectual Assets?

CGIAR recognizes that the sum total of past investments are embodied in its collective intellectual assets. These assets need to be effectively managed for the benefit of smallholder farmers all over the world. The CGIAR IA Principles, and the accompanying guidelines are one of many tools aimed at achieving the CGIAR Vision, a vision rooted in four principle goals; (a) reducing poverty and hunger, (b) improving human health and nutrition, (c) increasing food security and (d) enhancing ecosystem resilience through high-quality international agricultural research, partnership and leadership.

The approved IA Implementation Guidelines provide guidance with regard to the production, acquisition, management and dissemination of IA across the Consortium ensuring a healthy culture of transparency and consistency is achieved across its various research programs. This in turn creates opportunities for research partnerships and guards against misappropriation of intellectual assets by third parties.

Approval by the Consortium Board of the Implementation Guidelines is a positive step towards a consistent Consortium-wide approach to IA management and towards ensuring global access and use of CGIAR IA.

For more information
See selection of news items and documents on CGIAR Legal Counsel and Intellectual Property page “The exceptions that prove the rule; navigating intellectual property rights in public sector research” (cgiar.org)
Upcoming Events

September 2013
Science Forum 2013
Date: 23-25 September 2013
Location: Bonn, Germany.
Description: Will focus on “Nutrition and health outcomes: targets for agricultural research”
Website: http://www.scienceforum13.org/
First International Conference on Global Food Security
Date: 29 September - 2 October 2013
Location: Noordwijkerhout, The Netherlands
Website: http://globalfoodsecurityconference.com/index.html

October 2013
First Global Yam Conference “Yams 2013”
Date: 3-6 October, 2013
Location: Accra, Ghana
Description: First Global Yam Conference “Yams 2013” will be held in conjunction with the 12th Symposium of the International Society for Tropical Root Crops (IRSTC)-African Branch, from 3 to 6 October 2013 in Accra, Ghana
Website: http://www.iita.org/web/yams2013

12th Caribbean Week of Agriculture (CWA)
Date: 4-12 October, 2013
Location: Guyana International Conference Centre, Guyana
Theme: Linking the Caribbean for Regional Food and Nutrition Security and Rural Development
Email: cwaguyana2013@gmail.com

November 2013
International Conference on ICT4ag
Date: 4-8 November 2013
Location: Kigali, Rwanda
Website: http://www.ict4ag.org/en/

Entomology 2013: Entomological Society of America (ESA) 61st Annual Meeting
Date: 10-13 November 2013
Location: Austin, Texas, USA
Theme: Science Impacting a Connected World
Website: http://www.entsoc.org/entomology2013