

# PAFPNet ESSAY CONTEST

*QUESTION B: Choose two challenges related to agriculture or rural development in your community or country and describe how you think they should be addressed.*

***TITLE OF THE ESSAY:***

*FINDING SOLUTIONS TO INFORMATION POVERTY  
ALONGSIDE NEGATIVE ATTITUDE TOWARDS  
AGRICULTURE AND ADAPTING TO CLIMATE CHANGE IN  
THE FIJI ISLANDS*

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## **ABSTRACT**

Agriculture continues to be the economic mainstay of the Fiji Islands and is metaphorically referred to as the backbone of the country. The sector, however, is not immune to obscurity and faces many challenges. Two of such challenges are the lack of agricultural information being disseminated to needy farmers along with traditional negative stereotype towards agriculture and adapting to climate change. This essay examines how these predicaments can be overcome. Firstly, it will discuss how information poverty and negative attitude towards agriculture can be eradicated by the use of 'information and communication technologies' and awareness campaigns. Then it discusses the impacts of climate change and provides solutions to adapting to this calamity. These include sustainable agricultural practices, investment in development of expertise and Government assistance through prioritization and increased budget.

*FINDING SOLUTIONS TO INFORMATION POVERTY ALONGSIDE NEGATIVE ATTITUDE  
TOWARDS AGRICULTURE AND ADAPTING TO CLIMATE CHANGE IN THE FIJI  
ISLANDS*

Man, despite his artistic pretensions, his sophistication and many accomplishments, owes the fact of his existence to a six-inch layer of topsoil and the fact that it rains (Anon.). Historically; Fiji's economy has been heavily reliant on the Agricultural sector. Agriculture, including subsistence farming continues to play an integral part in the overall development of the economy as it provides foreign exchange earnings, food security, income and basic infrastructure for rural communities. A recent news article (Fiji Sun, 2010) reports; due to structural changes in other sectors of the economy, the agricultural sector's contribution to overall economic growth has fluctuated marginally, from 10.9 percent in 2001 to 11.6 percent in 2007 and slightly downward to 10.5 percent in 2008. Productivity in this sector has been constrained by many factors hence this essay examines two challenges experienced by agriculture in Fiji and ways to overcome such predicaments. These challenges include 'information poverty' along with traditional negative stereotype towards agriculture and adapting to climate change.

To begin with, successful farming naturally depends on the availability of resources- four tangible resources; capital, labour, materials, technology and one intangible resource; information (Heeks R and Ducombe R, 2001). Without quality agricultural information, bad decisions are made and learning does not occur. This is true everywhere in the world, but is a major problem in developing countries including Fiji which is extremely information poor. As a result, farmers are significantly affected. Kizilaslan (2006) argues that proper dissemination of information for agriculture and rural communities is a crucial tool in the fight against poverty and deprivation and Kiplang'at (1999) proposes farming communities can undertake effective adoption of agricultural inputs, improve marketing and adopt scientific methods. In addition, the widespread traditional stereotype that agriculture is a poor person's profession significantly drives people away from it leading to the lack of interest in agriculture among the general public and especially amongst the youth in the Pacific (ICT and Media to support agriculture, 2010).

Envisaging the solutions, firstly, information and communication technologies provide the essential link in bridging the information gap, hence transforming information poor farmers into knowledgeable entrepreneurs. The Ministry of Agriculture should make efforts to increase airtime for agricultural programmes on radio and television; prevalent media reaching most remote areas. Likewise, the use of mobile phones is extremely widespread in Fiji, a technology that can be harnessed for great benefit to the farmers. Vodafone, Fiji's first

mobile company has 303 base stations with over 90 percent coverage and 700,000 customers (Vodafone Fiji, 2010). Digicel, another mobile network, has over 70 percent coverage (Digicel Fiji, 2010). Agricultural information could be spread at a massive scale should softwares be developed to support the farmers via mobile phones (Ilahiane, 2007). For instance, a network of community workers in Uganda uses a suite of mobile applications to give farming advice, market data, pest and disease control training as well as weather forecasts (Gantt and Cantor, 2010).

Furthermore, awareness should be created amongst the general public about the importance of agriculture to the country. In the next few decades, food security would be the utmost concern of every Pacific Island nation including Fiji. This should be stressed right from primary school. Young people need to know that agricultural graduates go on to pursue specialist careers, becoming soil scientists, plant health specialists, agricultural economists, veterinarians, foresters, conservationists, or progressive farmers (ICT and Media to support agriculture, 2010). The Ministry needs to demonstrate that significant income can be generated from farming. This requires increasing the awareness of modern profitable agriculture techniques, including post-harvest handling and marketing.

The next challenge is adapting to climate change which is now a global phenomenon. Continued accumulation of heat-trapping “greenhouse” gases in the atmosphere are eventually leading to changes in the global climate, and in the climates of regions around the world as expressed in the 1996 report of the Intergovernmental Panel on Climate Change (IPCC) (Crosson P, 1997). In the past two to three decades, climate patterns have significantly changed in Fiji (Mataki, M., Koshy, K. and Nair V., 2006) and continued ocean warming, frequent tropical cyclones, flash floods and droughts are likely to have dramatic impact on food production systems.

Projected impacts of climate change are expected to be responsible for affected local livelihood and drop in competitiveness of cash crops. In particular, key future impacts are related to extended periods of drought. Loss of soil fertility and degradation as a result of increased precipitation will also negatively impact agriculture and food security as majority of the agricultural commodities are grown in the flood plains and the deltaic areas. Scientific studies state that in the absence of adaptation, a high island such as Fiji could experience damage of USD 23 million to 52 million per year by 2050 (Climate Change Impacts- Pacific Islands, n.d.). Furthermore, fisheries contribute significantly to GDP and rural livelihood. Consequently, the impact of climate change on fisheries would be important and would exacerbate other anthropogenic stresses such as over-fishing. For example, more intense

tropical cyclones and rise in sea surface temperature will negatively impact inshore fisheries (Climate Change Impacts- Pacific Islands, n.d.).

Sensible solutions towards adapting to the changing climate can only be attained through altering agricultural practices and useful innovations since humans have no control over the climate. Firstly, sustainable farming practices would help increase agricultural yields while minimizing threats to climate change. Due to alteration in overall weather patterns and rising sea level, we need crop cultivars that are heat tolerant, drought resistant, salinity tolerant and at the same time high yielding and of fine quality. Same applies to livestock breeds which need to be more hardy and rigorous (Nakalevu, T. 2005). Secondly, the shortfall in qualified personnel needs to be overcome. Expertise is required for veterinary services, plant and animal breeding, accurate husbandry and management and quality control amongst others. The Government should prioritize these issues and assist in adaptation through increased budget towards agricultural research and expertise development. Government can also set up agricultural organizations to target specific areas.

In conclusion then, the prevalence of challenges to agriculture in Fiji is being increasingly recognized. The onus is on the citizens of Fiji and the Government to take necessary steps to overcome these predicaments, some of which are suggested in the essay as solutions to these persisting challenges. All-in-all, there is dire need to employ information and communication technologies and create awareness to address information poverty and eradicate people's negative attitude towards agriculture. Investment is required in sustainable farming and agricultural experts while the government needs to enhance its efforts as well in terms of assistance and increased budget.

Approximately 1,098 words (including in-text referencing and abbreviations)

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## PACIFIC AGRICULTURE AND FORESTRY POLICY NETWORK (PAFPNet)

### YOUTH IN AGRICULTURE ESSAY, NEWS, ART AND PHOTOGRAPHY COMPETITION

#### **Application Form**

Applications should be accompanied by this form and addressed to Ms Miriama Kunawave, PAFPNet Secretariat, Land Resources Division, Secretariat of the Pacific Community, Private Mail Bag, Suva to arrive no later than 22 October, 2010. Communication will be limited to winners only or those requesting the return of original materials. Applications may alternatively be submitted by Fax (No. +679 338 6326), hand delivered to the SPC, Suva office or emailed to [lrhelpdesk@spc.int](mailto:lrhelpdesk@spc.int). Please call +679 3370733 – ext 35344 for further details.

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## A short biographical note

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I am Riten Chand Gosai, 21 years of age and a 3<sup>rd</sup> year Bachelor of Agriculture student at the University of the South Pacific, Alafua Campus in Samoa. I was born in the rural village of Nasau, in the district of Nadi which is located in the Western region (on the main island of Vitilevu) in the Fiji Islands.

Being born in a country which relies heavily on agriculture for economy and prosperity, I believe the onus is on us, youths to move the nation forward in sustainable agriculture and development. This inherently begins with good education. I started my education in 1995 at Mulomulo Primary, a rural village school in Nadi completing Classes 1- 6. Then I joined Mulomulo Secondary School (2001- 2007) where I was the Headboy and Dux of the school in 2006 and 2007. After successfully completing Form 7, I got an Australian Regional Development Scholarship (ARDS) to study for a degree in Agriculture at the University of the South Pacific's Alafua Campus in Samoa from 2008- 2010, where I currently am engaged in.

My family has largely depended on agriculture for a source of income; whereby members have been rural small-scale farmers and sugarcane cutters for generations with a few involved in outside work. This family affiliation to farming is where I derive my passion to accomplish something in agriculture for my community and nation at large. There is a pre-conceived idea amongst youth in Fiji that Agriculture and its studies are for the rural populace and weak students. I want to work towards breaking this stereotype and generate awareness that the less effort we put towards agriculture, the poorer we become, for the reason that we are failing to realize the full potential of what we are blessed with- arable land and the sea.

For a geographically isolated country like Fiji with a maritime tropical climate, a sustainable and successful agriculture sector is a key factor for growth and development. Daily advancements in "information and communication technologies" (ICTs) has the power to change our opinions and ideas about how we farm and to help greatly with its success. An aspiration has always been there and consequently this essay contest provides me with the inspiration and opportunity to make a difference and promote agriculture amongst the people of my country, particularly the youth.