

# Country Report on PNG International Hydrological Program Activities: 2015-2016

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## 1. Introduction

- ❑ PNG IHP National Committee was formed in January 1992. Anticipating to participate actively in IHP and regional programs such as AP FRIEND.
- ❑ Currently membership stands at eight (8). It includes institutions of higher learning, disaster reduction agencies & office of climate change.
- ❑ The Govt has driven key policies initiatives on “Green Policy on Sustainable Development & Renewable Energy”;
- The above principles are consistent with national dev. polices & UN SDG, particularly on environmental sustainability.
- ❑ All line agencies are to improve in water & environmental monitoring networks due to increase in resource developments.

## 2. Activities Organized by the National Committee

Significant water events organized at national level include;

- ❑ Water Day commemoration was held, March 2016.
- ❑ World Environment Day commemoration held, June 2016.
- ❑ Regular Climate Change Adaptation TWG meetings.
- ❑ Ad-hoc Early Warning System on coastal & inland floods sub-committee meetings.
- ❑ WaSH Committee meetings.
- ❑ Hydropower Projects Steering Committee meetings.
- ❑ Supply of hydrological data to the Dept of Works (DoW).

## 3. Other Hydrological & Water Related Activities Conducted by Individual Water Agencies

- ❑ Basic flood projection & monitoring for climate change adaptation programs have been identified in some provinces (Northern PNG).
- ❑ Many new hydropower plants proposed must be climate change compatible;
- This clean energy agenda to be driven by policy shift & now adoption of SDGs.
- ❑ A **WaSH Policy** was approved by Parliament this year;
- Improve access to water & sanitation services & to change hygiene behaviors, in rural & peri-urban settlements.

### 3. Other Hydrological & Water Related Activities Conducted by Individual Water Agencies (Cont.)

- ❑ CEPA is implementing a new system of fees/charges on water users under [Environment Act 2000](#);
- Waste water volume discharged has risen prompting CEPA to tighten its enforcement & compliance measures.
- ❑ Both natural & man-made conditions has affected fragile water resources;
- Due to small size, lack of natural storage, competing land use, vulnerability to natural hazards.
- Pollution of freshwater resources can have a significant impact on public health, quality of life, environment & economic development.

### 4. Participation in Regional Programs

#### ❑ Trainings

**Joseph Jure** attended System of Environmental Economic Accounting (SEEA) training on Water & Waste Accounts; Nadi, Fiji, from 14 – 16 September, 2016.

#### ❑ Meetings

**Joseph Jure** attended the 23rd IHP RSC Meeting and International Symposium on “Integrated Actions for Global Water and Environmental Sustainability”; Medan, Indonesia, from 19-22 October 2015.

#### ❑ RIMES Support

An agreement between RIMES & national partners including CEPA signed this October to strengthen capacities for an end-to-end early warning system, which flooding is a major component.

## 5. Future Tasks

- Attend the 24<sup>th</sup> IHP RSC Meeting in [Ulaanbaatar, Mongolia](#) from 24 – 26 October 2015.
- Anticipating a candidate from PNG to participate in the upcoming UNESCO IHP training courses.
- Continue engagement with stakeholders on climate change adaptation & disaster risk reduction.
- Continue providing hydrological & environmental assistance for development needs.
- Continue to provide sustainable land use practices & principles in areas of resource development (permits & discharge waste water).
- Contribute to regional activities as and when required.



**24<sup>th</sup> Meeting of International Hydrological Program Regional  
Steering Committee for the Southeast Asia and the Pacific**

**24-26 October, 2016  
Ulaanbaatar, Mongolia**

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**COUNTRY REPORT ON PAPUA NEW GUINEA  
INTERNATIONAL HYDROLOGICAL PROGRAM  
ACTIVITIES: 2015 – 2016**  
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*For*

Papua New Guinea IHP National Committee

## 1.0 INTRODUCTION

The Conservation & Environment Protection Authority (CEPA) is a new statutory authority which has replaced the Department of Environment and Conservation (DEC). CEPA was established by an Act of Parliament in May 2014 and became officially effective in January 2015 and has participated in the activities of the International Hydrological Program Decade (IHPD) from 1965-1974 under DEC, the forerunner of the International Hydrological Program (IHP). With the launching of the latter in 1992, the Papua New Guinea (PNG) IHP National Committee was formed in January 1992 with a view to participating actively in IHP and regional programs such as the Asia Pacific FRIEND.

The current membership of the PNG IHP National Committee is maintained at eight (8), and drawn from various government agencies and institutions of higher learning, including now office of climate change and national disaster reduction agencies. Over the period 2015-2016, PNG experienced very little participation in IHP and UNESCO activities. This resulted from unexpected political developments leading to our physical displacement and change in the administrative structure.

The National Government has driven this key policy initiative known as the Alatau Accord. It includes policy initiatives on “**Green Policy on Sustainable Development and Renewable Energy**”. Among the three key policies were; free education, improved health services and infrastructure development. The latter is our main concern, which has impeded on the natural environment while driving this policy. The government also envisages economic growth on one hand but on the other hand expects integration of sound environment management principles so that the environment is not degraded. Furthermore, these principles are also consistent with the national development policies and United Nations Sustainable Development Goals, particularly on environmental sustainability. The climate change adaptation uses water as the main influencing medium in preparing strategies for water related disasters and climate change, which consequently contributed to human livelihood.

As a result of many natural resource developments taking place during our short history the government has called on all line agencies to improve water and environment monitoring networks that has catered for development needs, climate change analysis and adaptation, promoting prudent environment management and monitoring food security.

## 2.0 ACTIVITIES ORGANIZED BY THE NATIONAL COMMITTEE

The significant water events organized at national levels include;

- (a) World Water Day commemoration was held in March 2016,
- (b) World Environment Day commemoration was held in June 2016,
- (c) Regular Climate Change Adaptation Technical Working Group meetings,
- (d) Ad-hoc Early Warning System on coastal and inland floods sub-committee meetings

- (e) Water and Sanitation Hygiene Committee Meetings,
- (f) Hydropower Project Steering Committee Meetings, and
- (g) Supply of Hydrological data to the Department of Works (DoW).

### **3.0 OTHER HYDROLOGICAL AND WATER RELATED ACTIVITIES CONDUCTED BY INDIVIDUAL WATER AGENCIES**

#### **3.1 Flood Projection and Monitoring**

Basic flood projection and monitoring which have been identified in the northern part of PNG for climate change adaptation programs. In addition, this year alone we see more new locations are being proposed for possible expansion.

In addition, early warning systems and flood forecasting were proposed especially for the locations mentioned above. Climate Change & Development Authority (CCDA) and CEPA are coordinating agencies for this program, while PNG National Weather Service (NWS) and National Disaster (NDO) Office are the executing agencies.

The agreement between the Regional Integrated Multi-Hazard Early Warning System (RIMES) and the national partners including CEPA was signed in October to strengthen capacities for an end to end early warning system, which flooding is a major component.

#### **3.2 Hydropower Development for Clean and Green Energy**

The new hydropower schemes proposed are been encouraged to be climate compatible. This clean energy agenda will be driven by a policy shift and now adoption of Sustainable Development Goal, which will require proponents to abide by the legislations promoting clean energy through environment regulation and climate change policy.

New hydropower scheme being planned are;

- (a) Small urban town electricity schemes - 5MW power supply for small urban town being funded by Asian Development Bank (ADB),
- (b) Laloki River hydro scheme (Central Province)–the 10-20 MW of electricity supply is an additional power to be supplied to Port Moresby,
- (c) Divune River hydro scheme (Oro Province)–10 MW to supply electricity to Popodetta township and parts of Northern Province,
- (d) A major hydropower project is being proposed for the Chimbu Province, where Wara Simbu has been identified to generate 1200Mw electricity.

#### **3.3 Water, Sanitation and Hygiene (WaSH) Activities**

Papua New Guinea government has passed the National Water, Sanitation and Hygiene (WaSH) Policy. The policy has been formulated to provide a framework to improve access to water and sanitation services and to change hygiene behaviours, particularly to the currently underserved rural and peri-urban settlement areas. It aims to provide

direction for planning, management, investments and activities for all sector stakeholders in order to achieve the policy objectives.

Once we have the legislative framework in place through the WaSH Authority Bill, it will pave way for mandated agencies to integrate the policy into their respective sector planning and budgeting processes. The core focus is to include hygiene and rural water supply & sanitation activities into the sector programs. The National Department of Health (NDoH), Department of National Planning & Monitoring (DNPM), CEPA, Childfund, Water Aid, World Vision and Unicef are the agencies implementing WaSH activities.

### **3.4 Extraction Permits (Use/Discharge)**

CEPA is a cost recovery agency and is implementing a new system of fees and charges on water users. Water use for industrial purposes in particular is regulated under Environmental Act 2000 and CEPA Act 2014. Over the last decade there was an increase in volume of water permitted for extraction. Also, the volume of waste water discharged has risen prompting CEPA to tighten its enforcement and compliance measures.

Funding and capacity have been a concern and this has hindered compliance monitoring activities. However, with the new system in place CEPA can be able to charge fees on water users and fund for its operational cost including compliance, enforcement and monitoring activities.

### **3.5 Water Pollution**

Both natural and man-made conditions has affected or polluted Papua New Guinea's fragile water resources due to his small size, lack of natural storage, competing land use and vulnerability to natural hazards over the last decade.

Pollution of freshwater resources, unsafe drinking water supplies and inadequate sanitation can have a significant impact on public health, quality of life, the environment and economic development.

Urbanization, rural development, growing populations, climate change and increased demand from industry and agriculture is putting further pressure on the country's freshwater resources, threatening the long term viability of inhabitants.

## **4.0 PARTICIPATION IN REGIONAL PROGRAMS**

### **4.1 Research and publications**

- (a) Contributed to the AP River Catalogues Volume VI but late for inclusion, perhaps due to quality issues.



## **4.2 Trainings**

**Joseph Jure** attended System of Environmental Economic Accounting (SEEA) training on Water and Waste Accounts in Nadi, Fiji from 14 – 16 September 2016. The training was organized by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) themed “System of Environmental-Economic Accounting (SEEA) for Asia Pacific Small Island Developing States”.

## **4.3 Meetings**

**Joseph Jure** attended the 23<sup>rd</sup> International Hydrological Program Regional Steering Committee Meeting and International Symposium on “Integrated Actions for Global Water and Environmental Sustainability”; Medan, Indonesia from 19-22 October 2015.

## **4.4 RIMES Support**

Regional Integrated Multi Hazard Early Warning System for Africa and Asia (RIMES) is planning to set up hydrology network (flood forecasting and early warning system) in Papua New Guinea and later planning to expand to the rest of Pacific.

Some of the activities are being proposed by RIMES are capacity development activities including training and resource support.

## **5.0 FUTURE TASKS**

- Attend the 24<sup>th</sup> IHP RSC Meeting in Ulaanbaatar, Mongolia from 24-26 October 2016,
- Anticipating a candidate from PNG to participate in the upcoming UNESCO IHP training courses,
- Continue engagement with stakeholders on climate change adaptation and disaster risk reduction – climate change, El Nino, hydropower development, rural water supply & sanitation and hygiene,
- Continue providing hydrological and environmental assistance for development needs and environment management,
- Continue to promote sustainable land use practices and principles in areas of resource development (permits and discharge waste water),
- Contribute to regional activities as and when required.

## **6.0 CONCLUDING REMARKS**

Once again, I take this opportunity to thank UNESCO Jakarta office and Mongolia IHP in meeting all the costs to enable me participate in the 24<sup>th</sup> IHP RSC meeting for the Southeast and the Asia Pacific and most importantly attend the international symposium.