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RISK RESILIENCE UNIT (rru) OF mINISTRY OF aGRICULTURE, LIVESTOCK, FORESTRY, FISHERIES & BIO-SECURITY (MALFFB)  DIRECTORATE BUILDING – “YUMI GO HAOS”

EARLY WARNING EARLY ACTION SYSTEM

# BACKGROUND

As part of the preparedness towards any forthcoming disasters and continuous monitoring of the agricultural sector, the RRU in collaboration with FAO and DARD have established an early warning early action system that is run by the Risk and Resilience Unit (RRU) of the Ministry of Agriculture, Livestock, Forestry, Fisheries and Biosecurity (MALFFB) to the agricultural extension officers. The department of agriculture has a total of 45 extension officers that are based on all of the 6 provinces covering almost all the area councils of every island. The early warning early action system is mainly setup as a system monitoring the growth of main carbohydrate crops, vegetables and fruits and also the additional information’s from the officers on any other crops or just any unusual on the agriculture.

This report serves to show what is collected from the extension officers and provincial agricultural officers during the seventh round of phone calls and show that if there is a spike in the data, then there would be need of further investigation.

# OBJECTIVE

The main objective of the early warning early action system is to find any sort of spike in the data which indicates a food security problem. Then a decision would be made to do further investigation and finding solutions to the food security issue.

# METHODOLOGY

The method used for this report is the same as the first survey which was El Nino Monitoring phone survey where phone calls were made from the RRU to the EO of the 6 provinces. A set of questions were designed to particularly collect information from the EO’s and then provide for the FSAC to review and to action any necessary issues. The questions that were used is attached to the end of this report and main focus on the carbohydrate crops, vegetables and fruits.

Materials used were:

* RRU Digicel phones – these phones were purchased by the RRU for two major assessments that were done around the months of June and October 2015.
* Digicel & TVL refill cards – the 46 EO’s across the provinces use both networks and so the team had to use both networks and sign up for the daily free calls.
* Kobo toolbox app – this was installed on the phones and is used to do the survey and the data is downloaded on the website where all the data is then downloaded and analysed.

# CHALLENGES

In doing this early warning early action system there are issues that we come across in most of all the previous rounds and including this current round of survey and they are:

* Not all the officers are reached for all the previous rounds and including this round due to phones not working, switched off or sometimes the officers are not on the specific areas that they are working on but on a training somewhere
* Sometimes there are no credit to do the calls which causes delay of the survey
* In some cases such as just recently we had an officer who was actively participating on the survey died so we have no data for that specific area on this current round of survey.

# MAIN FINDINGS

Based on the findings of the early warning early action system, majority of the respondents indicated that the crops are growing normally but just a few of the areas that indicated otherwise.

## CROP ANALYSIS

### Water Taro

This is a stable crop that a lot of people of Vanuatu consume, and can be found mainly on islands with rivers, streams and swamps as it grows only on water. Of all the 16 officers that were reached for this 7th round, a total of 10 responses have indicated that growth of the water taro is normal mainly on Torba, Santo, Malekula, Efate, Erromango, Tanna and Aneityum. 5 of the 17 officers have indicated that they don’t grow water taro and the main reasons are that there are no water source such as rivers, streams and swamps on these islands namely Santo, Pentecost and Ambrym.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  **Province** | **Island** | **Normal** | **We don’t grow it** | **We used to grow it but not anymore due to the drought** |
| **Torba** | Vanualava - Banks Islands | 1 |  |  |
| Gaua - Banks Islands | 1 |  |  |
| **Sanma** | Santo | 3 | 1 |  |
| Malo |  |  | 1 |
| **Penama** | Pentecost |  | 2 |  |
| **Malampa** | Malekula | 1 |  |  |
| Ambrym |  | 1 |  |
| **Shefa** | Emae |  | 1 |  |
| Efate | 1 |  |  |
| **Tafea** | Erromango | 1 |  |  |
| Tanna | 1 |  |  |
| Aneityum | 1 |  |  |
| ***Grand Total*** |  | ***10*** | ***5*** | ***1*** |

#### Reasons for not growing water taro.

|  |  |
| --- | --- |
| Responses | Frequency |
| No water source | 2 |
| No river, swamp | 1 |
| No swamp | 1 |
| No river | 1 |

### Island/Dryland Taro, Fiji Taro, Kumala, Manioc, Soft & Wild Yam, Island Cabbage, Cucumber, Banana and Pawpaw

Round 7 looks good for crops such as Island/Dryland Taro, Fiji Taro, Kumala, Manioc, Soft & Wild Yam, Island Cabbage, Cucumber, Banana and Pawpaw as all the officers reached have indicated that the growth is normal which means nothing is wrong.

|  |  |  |
| --- | --- | --- |
| **Province** | **Island** | **Normal** |
| **Torba** | Vanualava - Banks Islands | 1 |
| Gaua - Banks Islands | 1 |
| **Sanma** | Santo | 4 |
| Malo | 1 |
| **Penama** | Pentecost | 2 |
| **Malampa** | Malekula | 1 |
| Ambrym | 1 |
| **Shefa** | Emae | 1 |
| Efate | 1 |
| **Tafea** | Erromango | 1 |
| Tanna | 1 |
| Aneityum | 1 |
| **Grand Total** | **16** |

### Coconut

Coconut is one of the main cash earning plant that majority of the islands up north are earning money from. As per the graph below, all the respondents indicated that the growth is normal for coconut which shows that most islands are recovering however the officer on Ambrym has indicated a reduction on the production of coconut. This is because the area that the officer is based on is impacted a lot by the two active volcanoes on the island.

|  |  |  |
| --- | --- | --- |
| **Provinces** | **Islands** | **Responses** |
| **Normal** | **Reduce production** |
| **Torba** | Vanualava - Banks Islands | 1 |  |
| Gaua - Banks Islands | 1 |  |
| **Sanma** | Santo | 4 |  |
| Malo | 1 |  |
| **Penama** | Pentecost | 2 |  |
| **Malampa** | Malekula | 1 |  |
| Ambrym |  | 1 |
| **Shefa** | Emae | 1 |  |
| Efate | 1 |  |
| **Tafea** | Erromango | 1 |  |
| Tanna | 1 |  |
| Aneityum | 1 |  |
| **Grand Total** |  | **15** | **1** |

## ADDITIONAL INFORMATION FROM EXTENSION OFFICER’s

The above analysis is based on the information collected from the form but during the phone calls there were few other comments that were made.

Below are the comments from the officers and the area they are working on:

* **Daniel Neneth (Gaua Island)** – there is frequent rain but to the east and west side of Vanualava, the island taro is facing some issues but often the roots are okay.
* **Bakon Riu (Malo/Aore)** – there were water taro planted by farmers and the people but now not anymore.
* **Obed Ravo (West Coast Santo) –** all the root crops are recovering and the people of Fanafo village are continuing to plant in their gardens.
* **Vari Hoso Sokarai (Hog Harbour, Santo)** – the main worry of farmers is the La Nina period that is coming.
* **John Antas Vira (Sola, Vanua Lava) –** officer is requesting if the La Nina messages can be send via the phones to advise as per the post TC Pam and El Nino. Requesting that they need rechargeable batteries for phones in case we called but their batteries are worn out.
* **Taffau Ialilua (Central Pentecost) –** needs the government to do food processing training that will help them to have access to these foods during disasters
* **Jeremy Bongkone (South East Ambrym) –** coconut is still recovering but the copra production is low and there are signs of caterpillar attacking cabbage.
* **Sam Naliko (Erromango) –** around the area of Dillon’s bay is very dry and both the domestic animals and wild pigs damaging gardens which leads to food shortages in the area. 4 demonstration plots set up for resilience crops at Port Namu, Ipota community, Happy land primary school and the Dillon’s bay community for planting and improving of Kumala varieties and kava.
* **Edward Tavue (South Santo)** – replanting of coconut is taking place.
* **August Thompson (Emae)** – all crops, vegetables and fruits growing normal.
* **Mike Jimmy Nakapue (Aneityum)** – there are signs of yellowing on the manioc leaves as reported by the officer but he is suggesting that maybe due to the lack or depletion of the nutrients in the soil or repeated planting in the same area for years.
* **John Freddy Kouback (Big Bay, Santo)** – officer stressing the need of phones as they move from one place to another when working in order to give accurate information’s and also they do need budget to get around and do their observations.
* **Willie Iau (Tagabe, Port Vila)** – officer has been out visiting Emae and Tongoa. Signs of pests attacking crops but has already been reported to the quarantine. For the next month, the officer will be doing media talks about agriculture and La Nina.
* **Richard Narinam (West Tanna)** – need more coconut seed nuts for stocking for mainly copra and food and also in need of planting materials.
* **Nickless Lingtamat (Malekula)** – the crops are recovering as there are few showers of rain. The growth are normal but in fact they are growing back slowly. Coconut production will be good this year as it takes 9 months to be ready for harvest. There are signs of caterpillar attacking crops but it can be controlled locally.
* **Gaetan Tevi (North Pentecost)** – encouraging farmers to plant more in order to have a high production next year as the harvest this year is not that good compared to two years back.

# ISSUES RAISED AND RECOMMENDATIONS

As this is the early warning early action system that the main objective is basically monitoring and then reporting on the findings, and if there is a spike or issue then another investigation can be lodged to collect and verify it.

## ISSUES RAISED

The issues raised are mainly from the other additional information provided by the officers. The other issues from the survey itself are not major because with the water taro it is normal for some islands such as Ambae and Ambrym not to be planting it as there are no water sources or rivers and swamps. Also with the coconut raised by the officer on Ambrym is mainly the production of copra but the growth of the coconut is normal.

The issues raised are:

* **Vari Hoso Sokarai (Hog Harbour, Santo)** – the main worry of farmers is the La Nina period that is coming.
* **John Antas Vira (Sola, Vanua Lava) –** officer is requesting if the La Nina messages can be send via the phones to advise as per the post TC Pam and El Nino.
* **Taffau Ialilua (Central Pentecost) –** needs the government to do food processing training that will help them to have access to these foods during disaster
* **Sam Naliko (Erromango) –** around the area of Dillon’s bay is very dry and both the domestic animals and wild pigs damaging gardens which leads to food shortages in the area.
* **John Freddy Kouback (Big Bay, Santo)** – officer stressing the need of phones as they move from one place to another when working in order to give accurate information’s and also they do need budget to get around and do their observations.
* **Richard Narinam (West Tanna)** – need more coconut seed nuts for stocking for mainly copra and food and also in need of planting materials.

## RECOMMENDATIONS

So mainly we are looking at the areas of messaging, trainings, distributions and further assessments. Below are some recommendations that is need to be discussed and decided on and they are:

* **Messaging on La Nina** – this is raised by Vari Hoso and John Antas Vira which is needed very much for information that they can provide to the farmers on the La Nina event. The RRU is looking into the messaging using SMS as done in the past for TC Pam and El Nino but this time for La Nina. A lot of feedback from the officers is that they do not always have the proper information’s for the farmers,
* **Trainings on food preservation techniques** – to help have better stock for during disasters mainly for the local foods. One plant that is resistant is the wild yam which can also grow during El Nino.
* **Distributions of planting materials and coconut seed nuts** – mainly to the area of west Tanna according to Richard Narinam but again we have to contact another assessment to verify if it is really needed.
* **Further investigations on the area of Dillon’s Bay area on Erromango** – it is reported by the officer on Erromango that this area is dry which is causing domestic animals to break into gardens and eat the crops. And also the recurring damage with the wild pigs which was already an issue before TC Pam and El Nino.

# APPENDIX 1

## EARLY WARNING EARLY ACTION SYSTEM - Round 7

