

Evaluation of the Cyclone Damages and Economic Losses by Niver in India

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Abstract

Tropical cyclones impact human life and frequent storms affect their cost of living as well as economic losses. cause effect of recently effective disaster management predicts about natural risk and cause and effects of cyclones and providing rehabilitation to the people. It affects infrastructure, productivity along with force the people migrate. The government should collaborate stake holders to monitor also train the people to mitigate in addition to civil service society restore their residence and build their confidence to avoid migrants.

Keywords: Climate change, Natural disasters, Emergency measures, National Economy

INTRODUCTION

This paper about enhance multipurpose cyclone shelters facilities in the states of highly vulnerable districts Mahmood, M. N., Dhakal, S. P., & Keast, R. (2014). Developing pacific Islands are mainly depending upon tourism receipts and cyclone brings great damage by flood and the people trained in disaster management techniques and reduction in death toll Saverimuttu, V., & Varua, M. E. (2016). Recent change in climate disaster we are compelling rambling phenomenon have to be taken

to avoid from degrading the environment. Grant, S., Tamason, C. C., & Jensen, P. K. M. (2015). By these food crisis and financial crisis arise by that farmers become poorer of poor living in low income countries prosperous income group people in the developed world. Karapinar, B., & Häberli, C. (2010). India providing rehabilitation in district and state level but India's location based on number of vulnerable like drought, cyclone, earthquake, landslides etc. Pande, R., & Pande, R. K. (2007). New thinking and the contribution and the practical approaches are needed to rectify the threads of human security that climate change combined with social vulnerability current and future and inadequate ability to face the climate change all over the world. Farmers get complete lost in that year and households stress by managing households and the damages are measured by quantifiable terms and its affect economic gross domestic product. Warner, K., Geest, K. V. D., Kreft, S., Huq, S., Harmeling, S., Kusters, K., & Sherbinin, A. D. (2012). the roles of local level governance and disaster management institutions identify the the implementations of national policies and disaster risk reduction. Uddin, M. S., Haque, C. E., & Khan, M. N. (2020). climate change will affect in huge level like social, economic and environmental system. In developing countries affected by non-economic losses and it affects individual society and the environment. Fankhauser, S., Dietz, S., & Gradwell, P. (2014). Resources come city revenues national distributions and fund allocations in sectoral departments, government and private partnerships and technical co-operation and financial mechanism include broader development and spending. Capital budget essential to improve resilience for example disseminate risk information create incentives for low income communities and home owners, applying insurance coverage for livelihoods and private assets, innovative finance schemes etc. Office for Disaster Risk Reduction. (2019). Cyclone forecast cutting of road transport, closure of ports and its impact through damage private as well as public sector.

The impact of climate change in future India plays major role greenhouse Emitter as well as vulnerable countries in the world. The impact of climate changes is water stress, heat waves, drought severe storm and flooding and negative impact in health and livelihoods. Here 1.2 billion growing population dependent agriculture, India have more chances to affect by continuous climate change. Global projections indicate several changes will happen in India's future climate. Global observations of melting glaciers in the average rate of 10-15 meters per year. If the rate increases, flooding glaciers merge with rivers and it leads to scarcity of drinking water and irrigation. Precipitation also increased with monsoon rain it leads leading significant rain falling automatically it affects agricultural production.

Damage of property and infrastructure

Generally the climate impact extensive repair of infrastructure like houses, roads, rail networks and bridges, airport, runways, power lines, dams the govt. people society

and economy takes long gap recover from this hazards and return to their previous situation.

Lost productivity

Day to day disturbance occur by the climate condition cyclone contaminated entire production schedule like damages in machinery, industry, raw materials output etc., after that disaster itself to gear the production process is tough task to the entrepreneur. They face financial problems to start from the beginning and they are not able to supply to the customers in time.

Migration by security threads

Due to cyclone people abandon their homes in order to migrate to safe place and leads to tragedy. These people refuge in one place to safeguard themselves from that place they are not able to get adequate facilities and they are facing sanitary problems, food and water problem .It's force them tremendous immigration and unplanned consequences.

Federation of All India Farmer Associations (FAIFA)

Table 1. Affected Area with respect to Food Grains

Affected food grains	Affected in hectres
Paddy	3,25,000
Black gram	42,000
Cotton	21,000
Bengal gram	63,000

Nivar cyclone damaged 4.9lakh hectares in Andhra Pradesh alone (Table 1). More than 17,000 farmers are affecting cultivations of fruits, vegetables, flowers, chillies, bananas, and tomatoes. Flooded in the fields a few weeks after completion of sowing operation. To recover the losses from cropping and the corona virus induced lockdown coincided with the peak marketing season and the farmers have no other option than replantation, which involves additional expenses. Nivar caused biggest losses to agriculture sector in any disaster in India. In Tamilnadu estimated around 9687 hectares of agricultural and horticultural crop damaged by the storm.5950 hectares of matured paddy damaged.

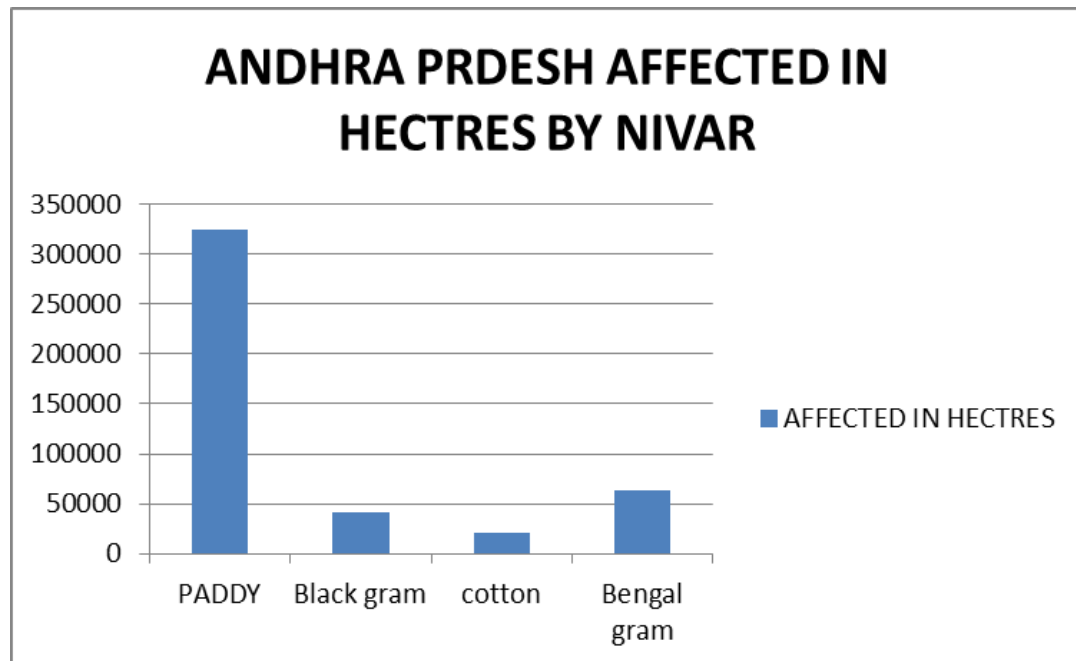


Fig 1. Andhra Pradesh affected in Hectares by Nivar Cyclone

NIVER LESSONS TO TAKE PRECAUTION

Climate change has become more power weapon to determine the universal movement in trade and economic movement. In order to determine the influence of environmental impact affecting the economy. This analysis was based on most influential factors (Fig.2).

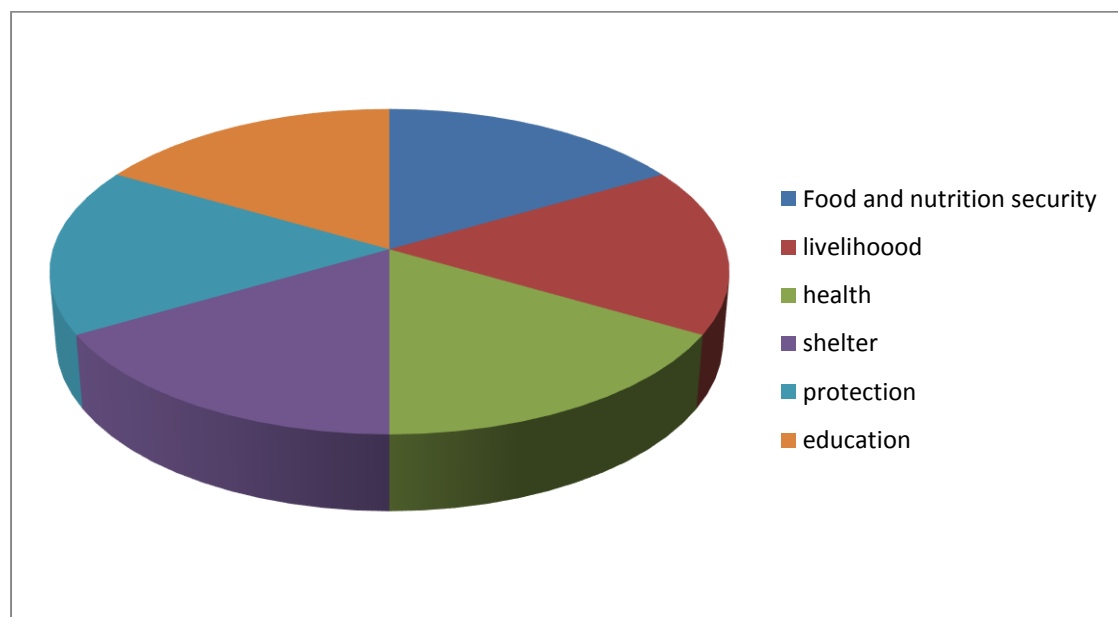


Fig.2 Influential factors on economy

Mitigation measures followed by the government

The experience from the past cyclone the government build better co-ordination to implement a long term mitigation projects. The Tamil Nadu government had deputed senior IAS officers, ministers to co-ordinate preparatory measures like shifting people from low and vulnerable areas to safer places, mobilising equipment and taking landfall measures with the help of collectors. In some of the areas surrounded by the water and it need permanent solution The India metrological department 's gives frequent alert to forecast about landfall and to help local bodies to prepare from cyclone. The government decided to allow measured water release from the reservoirs during and after cyclone.

Water resources department regulated the release according to the flow received at two hour intervals. This gave sufficient time for the river to carry the water without spill over. Disaster management teams stepped in to clear the roads of fallen tree, electric poles and cables.

Recommendations to the Government

- Dedicated, diverse and multi stakeholder government agencies provide effective information and monitoring systems and con consistently provide education programmes to vulnerable groups.
- Collaborate with development agencies to construct second homes for families living areas and build their migratory capacity through training, resourcing, education and networking.
- Civil service society should help facilitate resettlement of survivor's through comprehensive assessment of resettlement areas in long term settlement. Provide post trauma psycho social support to restore and built confidence to migrants.
- Develop infrastructure in vulnerable areas like houses roads, bridges without considering environmental factors to recover from depression.
- Government should work with experts and international partners in housing designs avoid complete to complete loss of such as infrastructures.

CONCLUSION

According to climate projections cyclones are increased intensively. The government should train and educate the people to safeguar them and to provide financial and mental support to recover from their losses and depression. Government and non-government agencies should joint hands to redesign there to avoid from maximum vulnerable. The climate change and cyclones play tremendous role in various sectors like agriculture, industry, education etc. The government should take better implementation and support to recover.

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