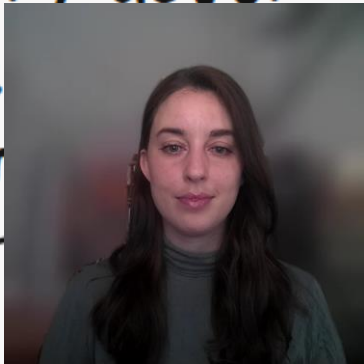


# ANTICIPATORY ACTION

FOOD AND AGRICULTURE ORGANISATION OF THE UN



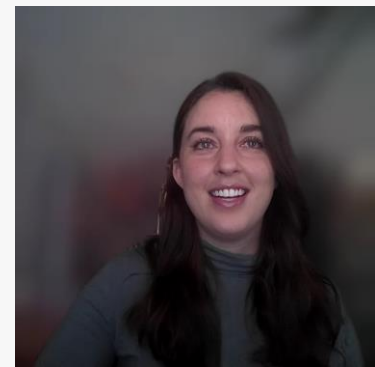
How anticipatory action  
is utilizing water  
resource information





# WHAT IS ANTICIPATORY ACTION?

"Taking steps to protect people and their livelihoods before a disaster strikes based on early warning or forecasts"





# ANTICIPATORY ACTION SYSTEM



## \* Risk information, early warning & forecasts

Use risk information data (through historical analysis) to understand where and who is affected by the hazard. With early warning and forecast information allow us to set up triggers for action. This is also based on a review of past events.

## \* Design & implementation of anticipatory actions

With communities, and using a gender and conflict sensitive lens, select no regrets anticipatory actions that will do no harm. This includes mapping the procurement and transport processes.

## \* Pre-arranged financing

Flexible financing is the key for anticipatory actions to be successful. FAO has its own anticipatory action fund which over 5 donors contribute to yearly to activate early. We also have funding at the national level through bilateral donor support. Activations can be up to

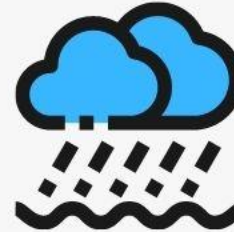


# TARGET CLIMATE RISKS

Anticipatory action is primarily being used for climate hazards but is being explored for socio-economic risks



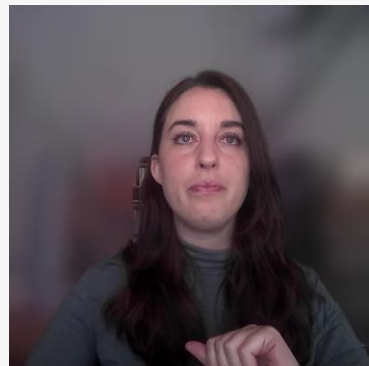
Flood



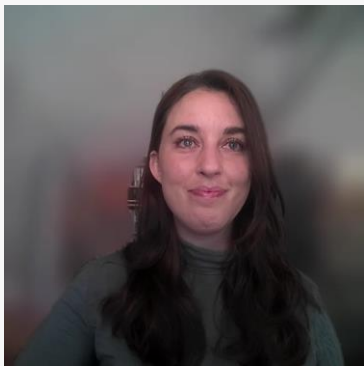
Typhoons



Drought



# WHAT IS THE LINK WITH WATER MANAGEMENT?



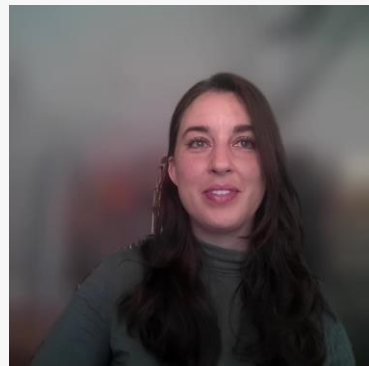
# TOO MUCH WATER - FLOODS & TYPHOONS *eee*

## Early warnings & forecasts

The approach relies on using up-to-date hydrometeorological information such as **ground water data, forecasted and observed rainfall and wind tracks**. Triggers are further established based on historical data being collected and on past disaster events. Lead times are usually between 3-10 days.

## Anticipatory action selection

Short-term actions can also be linked to water management. This can include providing **purification tablets, supporting the storage of clean water from rising floods, or evacuating people and livestock from low-lying areas**.





# ACTING EARLY IN Typhoon Noru VIET NAM



## Early warnings + trigger points

Triggering system is under development and we have been using:

- 429mm of accumulated rainfall
- 90kph windspeed

Typhoon events in Central Viet Nam are closely linked flooding. We had a 3-day lead time to implement anticipatory actions.



## Anticipatory actions

Three anticipatory actions were deployed based on the above information:

- Unconditional cash
- Water-tight drums
- Livestock evacuation



# TOO LITTLE WATER - DROUGHT

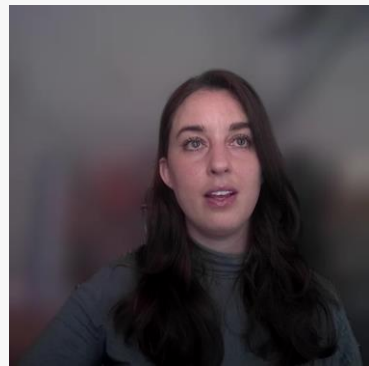


## Early warnings & forecasts

The approach relies on various data sources, with a key focus on agricultural drought: **observed and forecast precipitation, observed and forecast temperature, ENSO, soil moisture conditions, normalized difference vegetation index and ground water levels.** Lead times are usually 1-3 months and triggers are based on historical analysis of past events.

## Anticipatory action selection

Short-term actions to mitigate the impact of drought can include: **drought resistant seeds, clearing irrigation channels (cash for work), water pumps/irrigation support, water drum storage close to households, vegetable production with drip irrigation, livestock water management and systems.**





# ACTING EARLY IN Drought THE PHILIPPINES



## Early warnings + trigger points

FAO managed to act 4 months ahead of a declared drought in April 2019 on the island of Mindanao. The following information was used: declaration of El Niño (on average 35% reduction on rainfall with this event), below-average observation and forecast precipitation (SPI), above-average observed and forecast temperature, soil moisture conditions and confirmation of below average ground water levels.



## Anticipatory actions

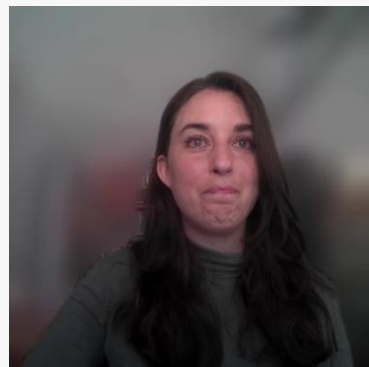
- Improve household access to water (pumps and water storage)
- Drought resistant seeds - rice and vegetables
- Cash for work to clear irrigation channels
- Families frequently consumed more diverse foods and ate more often than other families in the area. Farmers saved input costs and avoided purchasing seeds on credit.



# COST EFFECTIVENESS



Every USD\$1 invested in anticipatory action can have a return of USD\$7 in avoided losses + added benefits





Anticipatory action can build upon the long-term gains and investments of water management



Are we missing any critical short term actions that can build on the lessons learned from wider water management programmes?



# MOVING FORWARD



Collectively support communities to take long and short-term actions to control how they are impacted by floods or droughts



Share data and improve how we provide forecasts and warnings to communities and governments



Importance of inter-regional capacity building and advocacy tools in bringing the Water and DRR communities together to work towards common goals the same et







**THANK YOU**

