

# FARMERS AGAINST FLOODING: GORAKHPUR'S SOCIAL RESILIENCE INITIATIVE



Credit: worldwaterweek.com

## PROBLEM

- The city of Gorakhpur is one of the most flood prone in northern India, and since 2005 climate change has caused a considerable increase in the frequency and severity of flooding events
- Knock on effects from the increased flooding include larger areas of stagnant water, which in turn has led to a significant rise in waterborne diseases spreading (dengue fever, malaria and Japanese encephalitis).
- Irresponsible and unplanned urban expansion has taken up farm land and green space that were used as flooding planes to ease pressures on city infrastructure

## SOLUTION

- In 2009 the Gorakhpur Environmental Action Group (GEAG), a local NGO, initiated community based climate adaptation programmes, with a focus on targeting vulnerable and low income farming families who were at greatest risk from the change to the weather patterns
- The two-pronged approach meant that farmers were educated and encouraged to switch from mono-cropping to a format of crop rotation alongside the use of an early warning system
- A text messaging network for local farmers was set up to inform them of impending severe weather shocks, as well as to schedule irrigation and harvesting in a consistent nature

## IMPACT

- The initial benefits of the programme gave the local farmers bigger yields, thus leading to greater profits and better livelihoods. Having this added financial security meant that farmers felt under less pressure to sell their land off to urban developers and therefore protecting the open green spaces that were the main defense to flooding.
- The switch to crop rotations meant that the soil became healthier and nutritious, giving the farmers who took part an edge with their produce over competitors at local markets
- The programme not only preserved the current farmland available, but also expanded it which has led to better flood management practices

## AT A GLANCE

- Gorakhpur, a city and region already prone to flooding, has seen more frequent rainfall
- Low incomes for vulnerable farmers leads to them selling of green space which is used as a flooding planes to urban developers
- The GEAG started programmes to improve farming practices and train the local government to be better organised to assist in saving flooding resources
- The programmes acted as very good examples of how communications activities such as digital outreach and training can be used



Gorakhpur still experiences large amounts of flooding, however there has been a marked improvement since the start of the initiative

Credit: Indiatvnews.com

## COMMUNICATIONS

- The text messaging service that was set up is a prime example of how digital communications can be employed in the fight against climate change
- GEAG also tackled the issues of poor local governance that were contributing to mismanagement of flood mitigation resources
- Negligence and lack of organisation meant that urban expansion was going unmanaged, so GEAG created training programmes, which allowed local governance to start the process of regulating land used as flood planes, and to create 'no development zones' in order to provide further protection to both farmers and the city

