Tropical Storm Nate passed through Costa Rica in early October causing widespread damage to infrastructure and to agriculture. The damage to different crops is still being assessed by the authorities, but preliminary information indicates that rice farmers were particularly affected in the main production region of Guanacaste.
General Information:
Effects of Tropical Storm Nate on Costa Rican Agriculture

Tropical Storm Nate generated the heaviest rains and the most widespread flooding and damage that Costa Rica has experienced in decades. According to a press release from the Ministry of Agriculture and Livestock (MAG), more than 124,000 hectares were affected by the storm and over 245 officials are collecting information on the damages caused to agriculture.

Rice, palm oil, sugar cane, horticultural products, and pastures (beef and dairy cattle) are some of the most affected products. The most affected area is the Northern Pacific (Guanacaste) where MAG estimates that 106,000 hectares suffered the effects of the storm. Products impacted from this region include pastures (mostly used for beef cattle), sugar cane, rice, beans, melons, and papayas. Products affected in the Central and South Pacific regions include rice, sugar, palm oil, melons, and papayas, among others.

According to the Chamber of Agriculture, the agricultural sector will be impacted in several ways. The poor condition of bridges and roads will complicate the transportation of products out of the farms even in areas that were not flooded. Some producers could be affected because they may not receive supplies on time, for instance, carton boxes for packaging of pineapples or ornamental plants. In addition, the lack of electric power may have affected the activities of some dairy farms. Some areas planted with sugar cane and rice in Guanacaste were completely flooded, and some remained under water for days after the storm, so the assessment of the damages will have to wait until the water level comes down.

According to the Minister of Agriculture, Luis Felipe Arauz, “the actual numbers of production losses will take several weeks. MAG is working on a consolidated report and only has preliminary data at this point. Accurate information is not available yet for some areas in the Southern Regions because of problems with the roads and bridges, but we know that producers were severely affected”. Minister Arauz also mentioned that Costa Rica has enough rice and beans in stock and that there will not be shortages of those staples of the Costa Rican diet, even though those two crops may have been severely affected by the rains and flooding.

Minister Arauz also mentioned that in the Central Valley, in the areas of Cartago and Los Santos, there are reports of damages of different magnitude to coffee plantations, potatoes, onions and horticultural crops such as green peppers, tomatoes, carrots and chayote. However, the President of the Chamber of Potato Growers, Fabian Segura, indicated that in the higher altitude areas of Cartago, the rains were not as strong, and production of potatoes and onions did not suffer the effects of the storm. According to Segura, horticultural products other than potatoes and onions suffered more damages.

The Atlantic region of the country, where most of the bananas and a large percentage of the pineapples are produced, was not affected by this tropical storm.

As additional information has become available, rice appears to be one of the most affected products. According to a preliminary assessment by Conarroz (National Rice Corporation), of a total of 14,349 hectares planted at the time of the storm, 6,316 hectares suffered damages. Of the damaged area, 2,401 hectares suffered total losses. The rest will have production losses of different magnitude, to be determined until the time of the harvest. Rice production in the province of Guanacaste (Northern Pacific) suffered the most (2,040 hectares were lost). That region is the main rice production area in the country. In Guanacaste, 220 producers
and 5,672 hectares were affected. In the Central Pacific, 73 producers and 1,700 hectares were affected. In the Central Pacific, fewer producers were affected because the harvest was almost completed and because area planted is smaller in that region. Most seed plantations were not affected.

Producers who did not lose their entire crop are dealing with problems with different types of fungus and pests, infrastructure, and quality of the product. There are also financial issues, as many producers will need additional inputs and resources in their attempt to recover their plantations. In the meantime, the government is asking different local financial institutions to restructure payment conditions and to provide additional credit to farmers.

According to the LAICA (Costa Rican Sugar League), there could be a reduction in sugar production of about 7,000 metric tons because of the flooding in Guanacaste. However, the positive news for sugar growers is that the water came out relatively quickly from the flooded fields and without a strong current, so the plants were not uprooted.

The Costa Rican Coffee Institute (ICAFE) indicated that it is still evaluating the losses and will issue a report in late October. In the meantime, ICAFE has received reports of higher fungal incidence such as coffee rust in some coffee plantations.