Harvest and postharvest technologies

- To reduce dependence on rice imports, two rice processing centers for quality rice production and processing – Daylard Tena and Ndaling Pen – have been established in Chad. These centers are operating through an innovative co-sharing mechanism between farmers, processors and traders.

- The rice processing centers cover the whole rice value chain from quality seed through paddy production and marketing to processing of high quality rice and production of flour and rice-based products for the markets.

- The centers have succeeded in bringing together all the stakeholders in the rice value chain and are giving multiple benefits, such as improved quality of locally produced rice, profits from the co-shares, job creation in rural areas and linking of smallholder farmers to the market. About 125 (100 women) participants from Chad were trained in confectionery processing.

- Training of local blacksmiths: Models of rice threshers, based on the ASI prototype provided by AfricaRice, were built by local blacksmiths and displayed at Chad’s 50th Independence Day celebration.

Policy advice

- The 20th Session of the AfricaRice Council of Ministers was held in N’Djamena, Chad, in December 2013, under the chairmanship of Hon. Moussa Mahamat Agrey, Chadian Minister of Agriculture and Irrigation. The Council formed a number of resolutions to boost the rice sector in the AfricaRice member countries, highlighting the importance of favorable rice policies to create the right environment.

Africa-wide rice task force activities

- Chad has been an active member and benefited from the activities and funding of the six Africa-wide Rice Task Forces coordinated by AfricaRice – Breeding, Agronomy, Gender, Mechanization, Policy, and Processing & Value Addition.

- The Task Forces have provided a unique opportunity for Chad’s researchers to interact and partner with their counterparts from other AfricaRice member countries.

- Funds contributed to Chad through the Task Forces have complemented government allocations significantly and ensured the continuation of research and the training of scientists and value chain actors.

Rice Hubs and Innovation Platforms

- With technical support by AfricaRice, Chad has established two rice sector development hubs (Hubs), one in Tandjile-Est for the rainfed lowland ecology and the other in Mayo-Kebbi Est for the irrigated ecology.

- The rice hubs serve as field laboratories where research outputs and products are being tested, adapted and integrated – with feedback provided to researchers on technology performance.

Chad joined AfricaRice (ex-WARDA) in 1983.

- The Institut tchadien de recherche agronomique pour le développement (ITRAD) is one of the most important national partners of AfricaRice.

- As a member country, Chad takes part in statutory meetings of the AfricaRice Council of Ministers, which is the Center’s highest governing body.

- Chad is also a member of the AfricaRice National Experts Committee.
“Rice is global and it is a big business, Rice is life in Africa.”
-- Dr Harold Roy-Macauley, AfricaRice Director General

Contributions by AfricaRice to Chad

- Between 2009 and 2016, Chad has benefited from 5 donor-funded projects, coordinated by AfricaRice.

- AfricaRice, in partnership with ITRAD, has contributed to boosting Chad’s rice sector in terms of policy and technical advice, improved seed, cropping practices and processing technologies, capacity development and support to rice value chain development.

Capacity strengthening

- Between 2009 and 2016, 1 MSc scholar from Chad was trained. About 25 researchers and value chain actors have participated in group training workshops, strengthening Chad’s capacity for rice research and development.

- A private equipment fabricator in Chad was trained to produce and deliver ASI threshers to Chad and neighboring countries.

Importance of Rice in Chad

Boosting sustainable rice production is high on Chad’s agricultural agenda. Following the resurgence of interest in the rice sector among consumers and rice producers, the Chad government has focused on the development and maintenance of infrastructure. Tractors and other necessary inputs to rice farmers have been provided and rice mills have been set up.

Rice has been traditionally grown in the southern part of the country, particularly in the Tandjilé region, where it is an important staple. Suitable land for rice cultivation is estimated at 355,000 ha in Chad. Rice is cultivated mainly in the lowland (68.8%) but also in irrigated (18.2%), upland (12.8%) and submersible rice growing environments (0.05%).

About 235,000 ha of rice was harvested in 2016 and the estimate for 2017 is 250,000 ha, according to USDA. During 2001-2016, Chad produced an average of 240,667 t of paddy with an average yield of 1.37 t/ha. Chad’s milled rice consumption in 2016 was 185,000 t.

Demand for rice throughout the country is increasing. But domestic production remains low and Chad has become dependent on imports. In addition, the threat of droughts has intensified with climate change and the country is desperately in need of effective water management technologies.

In line with its strategy to boost rice production, Chad has undertaken a series of research for development activities in partnership with AfricaRice. AfricaRice and ITRAD have been collaborating to develop improved rice varieties and accompanying technologies to increase rice productivity in the country.

Rice Statistics for Selected Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>Average</th>
<th>2015-16</th>
<th>Annual growth rate</th>
<th>2015-2016 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paddy production (t)</td>
<td>303,000</td>
<td>242,000</td>
<td>267,000</td>
<td>240,667</td>
<td>12.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area (ha)</td>
<td>194,000</td>
<td>238,000</td>
<td>290,000</td>
<td>274,000</td>
<td>14.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yield (t/ha)</td>
<td>1.58</td>
<td>1.03</td>
<td>1.03</td>
<td>1.08</td>
<td>-1.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption (t)</td>
<td>187,000</td>
<td>185,000</td>
<td>194,000</td>
<td>164,500</td>
<td>12.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Import (t)</td>
<td>5,000</td>
<td>40,000</td>
<td>40,000</td>
<td>20,000</td>
<td>-1.67</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Improved varieties

- Through participatory varietal selection (PVS) trials, carried out with support from donor-funded collaborative projects, Chadian farmers have selected several improved varieties: NERICA 6, NERICA 11, NERICA-L 26, NERICA-L 33, NERICA-L 50 and NERICA-L 55. More than 72,000 farmers had access to these newly introduced varieties. About 130 farmers (including 75 women) were trained in PVS.

Seed system

- Seed of the selected varieties have been produced and distributed to farmers. About 25 technicians were trained in community-based seed production system; more than 100 farmers, including 50 women farmers and seed producers, have been trained in seed production. The national seed system has been revived.