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Increasing the productivity of sorghum farmers in the Sudan Savannah of Nigeria: Effect of access to improved technology and market

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Sorghum has assumed greater importance in the economies of several African countries especially with the renewed interest by processors who are interested in using the grain to compliment/substitute wheat and barley in the confectionery and malting industries. Low on-farm grain yields are attributed to low use of inputs including seeds and fertilizers as well as good agronomic practices. ICRISAT Nigeria, in collaboration with several partners under the Agricultural Transformation Support Project (ATASP-1) implemented several activities including thematic training, on-farm technology demonstrations, community seed production and formation of innovation platforms (IPs) for market linkages. Remarkable progress were made in enhancing access to quality seeds and other inputs to over 40,000 farmers while expanding knowledge of Improved technologies to over 100 communities. During the 2016 cropping season, farmers produced over 70,268 Mt of grains valued at ₦9.135billion (US\$29M). The impacts of trainings resulted in about 60% improvement in the understanding of good agronomic practices and post-harvest handling by the farmers and extension agents. The use of improved technologies increased grain yields by 30 to 64% (improved varieties), 27 to 38% (seed dressing), and 20% to 55% (tillage practices). Through IPs and market linkages to large scale processors, 109.76 tons of seeds were procured, distributed and planted. Average yield obtained from improved technologies was 1.5 t/ha compared to 1.1 t/ha by other farmers giving a 40% increase. A total of 1,093 women farmers comprising of about 34.2% of the total number of participating farmers benefited directly from the project. Seed fairs, radios and audio-visual broadcasts on improved production technologies and market availability were used to reach non-participating farmers within the zones. The combination of methods stimulated adoption of improved sorghum production technologies and market linkages proofed effective in achieving both increased sorghum yields and household income.