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IS A FUNCTIONAL POTATO SEED SYSTEM POSSIBLE IN A DEVELOPING COUNTRY? EXPERIENCES FROM MALAWI

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Potato production in developing countries like Malawi is constrained by lack of quality seed tubers. Through the collaboration of International Potato Centre (CIP) and the Department of Agricultural Research Services, a potato seed system has been put in place. The seed system has two approaches: informal and formal sub-sectors. Through the informal sub-sector a technique called "Positive and Negative Selection" is used where farmers select the best plants from their fields to be used as seed tuber for subsequent crop. Through this technique smallholder farmers have significantly increased potato yields as high as 50%. Furthermore, there has been drastic reduction in pests and diseases like bacterial wilt and viral diseases. The formal sub-sector starts with pathogen free plantlet from a tissue culture laboratory, through screen houses (aeroponics and sandponics) and finally open field multiplication in disease free fields. The whole process of seed production within the formal sub-sector is regulated by an independent seed certification unit. Positive experiences from the novel Malawi potato seed systems have created demand for quality seed tubers which has also increased the competitiveness of the Malawian potato within the confectionary industries like French flies and crisp making.