

From Development Aid towards an Economic Factor: Sustainable Production of Clean Cookstoves in Madagascar

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Abstract: ADES operates eight manufacturing centres in different regions of the country, where Madagascan employees manufacture and sell clean cookers, advise existing and potential users and raise awareness among the public. Thus, ADES directly creates jobs in Madagascar and facilitates the transfer of knowledge and technology. With direct investments we create sustainable local value chains and livelihoods in a country that belongs to the least developed countries in the world. About 500,000 acres of forest are lost every year. Eighty per cent of the wood cut is used for cooking. Changing respective knowledge, attitudes and practices is a multi-generation task. ADES is responding by an indefinite, sustained and integrated programme consisting of production, sales and distribution, environmental education and awareness raising, user trainings, marketing and fundraising. Our target groups are actively involved in environmental and climate protection by purchasing our cookstoves – even at discounted price. Thus, they are not merely recipients of aid, but they themselves take care of their livelihoods. A broad network of local, female resellers and established contractual relationships with large customers are of central importance for the sustainable, country-wide distribution of our cookers. Mobile sales promotion in Madagascar's North forms a new, innovative component of our sales and distribution concept. Innovation and constant optimization of production processes and products are guiding principles of our programme. Examples: With enhanced production our firewood consumption has increased. Yet our goal is to reduce the consumption of wood in Madagascar. Therefore, in collaboration with a company we developed Artemisia briquettes. In the production of active ingredients for malaria drugs based on Artemisia vegetable residues incurred. It has been proved that a high-quality fuel can be obtained from this biomass. So we had to build new kilns to be fired with Artemisia briquettes with good results: With almost half the amount of fuel, we are able to fire almost twice as many clay combustion chambers for our cookers. Because of higher heat, the clay combustion chambers fired with Artemisia briquettes are lighter, harder and therefore much more durable. This makes it possible to design future cookers in such a way that they require less metal and thus become more cost-effective. Having introduced a semi-industrial production our output will be doubled. The production of uniform cores having a homogeneous mixture is possible, which in turn increases the strength of the clay and reduces rejects during production. Branding of ADES e.g. product marketing via various communication tools is crucial to generate trust and awareness on our products in the country. The financing of our work is based on accessing diversified funding sources ensuring the financial sustainability of our programme.

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