

Factsheet interim findings Applied Research Fund Call 1



Infant foods from local resources as a pathway to a better food and nutrition security in Benin (INFLOR)

Summary

The INFLOR project aims at contributing to improved access to better nutrition for children at age of complementary feeding. The main research question is: how to promote nutritious and affordable complementary foods for children based on local food resources (LFR)? The project brings together researchers, food quality managers and private food companies to develop, certify and disseminate healthy and nutritious infant foods based on LFR in Benin.

It is expected that (i.) knowledge is improved on LFR nutritional properties; (ii.) new infant foods are developed, certified and adopted for production by the private practitioner for urban consumers, (iii.) adapted food formulas are developed per agro-ecological zones for rural consumers, (iv.) capacity is built through five MSc students. An improved access to better nutrition could be reached among infants in Benin.

So far, promising local food ingredients have been identified, characterized and mapped by agro-ecological zones of Benin. Furthermore, one infant food formula for industrial use and three generic formulas for agro-ecological zones of Benin have been successfully developed and analyzed. Consumer perception on existing infant flours and consumer acceptance of developed formula were assessed across the country. Currently, pilot production, infant growth, tolerance studies, market/profitability studies, and certification are the major activities under implementation.

Interim Research Findings

Up to 116 species have been recorded as sources for infant foods (86 plant species and 30 animal species). Nutritional maps have been realised and compiled in a guide of nutritional choice according to agro-ecological zones. One standard recipe and three generic formulas aligned with codex requirements were produced in the laboratory in close collaboration with Group Pépète d'Or (GPO) and accepted by consumers across the country. In terms of consumer perception of existing infant flours, it was found that currently only 10 brands (imported and national) are used at household level and 63% of the households are still using inappropriate flour for complementary feeding of the children. For certification of the quality of the optimized and tested products, preliminary visits have been conducted for checking company facilities. Furthermore, sampling and analysis of raw materials and the collection of information on good agricultural practices in areas where raw materials are produced for the manufacture of infant flour were performed.

Outcomes achieved

Developed infant food formula are being tested. Training of local communities on the processing package is being performed. Results from such activities will be disseminated accordingly to expect possible behavioural change.

Messages to	<p>A) Actors from private sector:</p> <ul style="list-style-type: none"> • There are several business opportunities for private sector for infant feeding, since it was found in our research that in still 63% of the households in rural areas there is no specific baby flour formula for infant complementary feeding. This urges the promoting and enabling of fair market access to healthy and certified baby food formulas based on local food resources. <p>B) Civil society and practitioners organizations:</p> <ul style="list-style-type: none"> • Efforts are being made by agri-food companies to make a variety of baby flours available on the market, but we found that only 14% of households have access to national infant food brands sold on these markets. In a context of low purchasing power such as in Benin, there is a need to promote adapted domestic formulas based on local food resources available by agro-ecological zones, through community nutritional education programs. <p>C) Policy makers:</p> <ul style="list-style-type: none"> • In a context of low education rate such as Benin, it is difficult for consumers to assess which flours are appropriate for complementary infant feeding. Therefore, it should be mandatory that the nutritional qualities and certification of infant formulas is assessed through standard procedures. In addition, regular quality control should be performed to guaranty healthy infant complementary foods in markets.
Knowledge products	<ul style="list-style-type: none"> • "Indigenous food ingredients for complementary food formulations to combat infant malnutrition in Benin: a review", by Flora J Chadare et al. Society of Chemical Industry, July 2017 • Project PowerPoint presentation at ARF country workshop Benin, October 2016 • Project poster, October 2016
Knowledge networks	<ul style="list-style-type: none"> • Member of AgriProFocus Benin; • Member of practitioners' social network Whatsapp "REDAD 25 ans Déja"
Co-creation	<p>Commercial and domestic infant formulas were developed through co-creation process of scientific knowledge from researchers, practical experience of agri-food business company, endogenous knowledge of the community, perceptions and preferences of the consumers and the expertise of national food quality agency. Policy makers will be added to the co-creation process in order to stimulate behavioural change of national companies marketing infant formulas.</p>
Consortium Partners	<ul style="list-style-type: none"> • GPO – Groupe Pépité d’Or • ABSSA – Agence Béninoise de Sécurité Sanitaire des Aliments • Faculté des Sciences Agronomiques, Université d’Abomey-Calavi • Wageningen University, Food Quality and Design
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