

# INFLOR

Infant food from local resources as pathway for  
a better food and nutrition security in Benin

Polycarpe KAYODE

Faculté des sciences Agronomiques  
Université d'Abomey-Calavi

Cotonou, 29 October 2016



## Project members

Adjadogbedji Avouzoukan S.

Hounhouigan J.

Linnemann A.

Toleba M.

Kayodé P.

Chadaré F.

Fanou N.

Madodé Y.

Adjadogbedji B.

Kpenavoun S.

Amadou I.

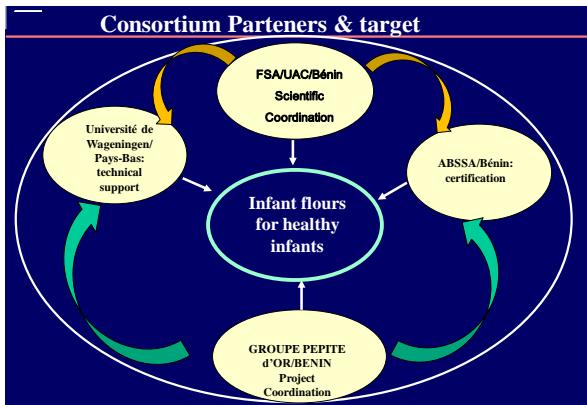
## Project aim

Develop and promote infant foods:

- Certified
- Safe
- Improved nutrients content;
- Affordable

Using local food resources available in Benin

## Consortium Partners & target



## Project activities

WP2. Inventory of LFR

WP3. Formulate infant flours (business & generic formulars)

WP4. Consumers study

WP5. Pilote production

WP6. Certification

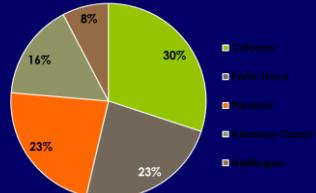
WP7. Dissemination

## Approach/methods

- Socio-anthropometric
- Advanced foodtech.
- Analytical methods and
- Participatory approach

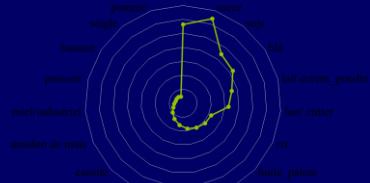
# PROJECT RESULTS

## Infant foods commercialized in Benin



N= 313 Local infant foods identified

### Main ingredients used to produce locally commercialized infant foods



### Diverse local infant food Ingredients are available

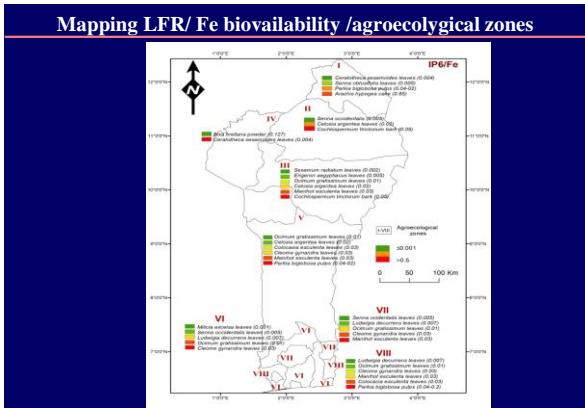
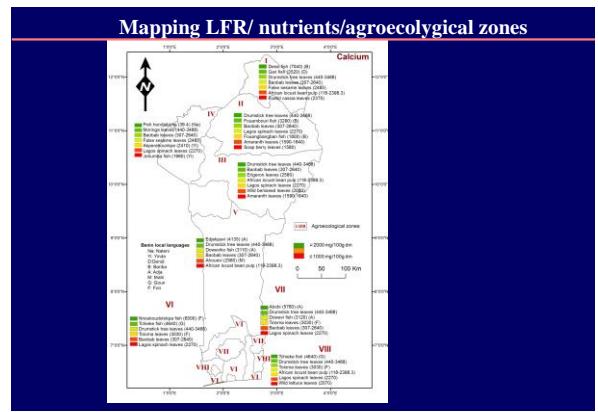


### Diverse local infant food Ingredients are available

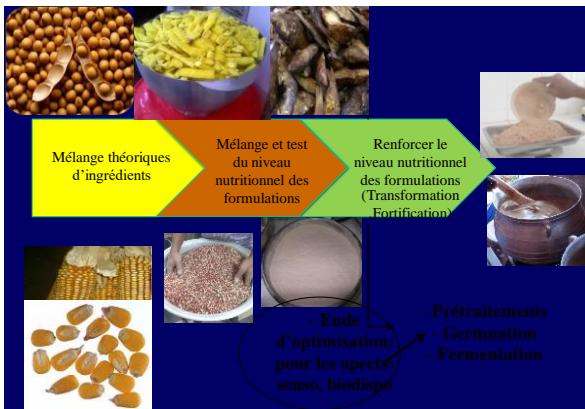


### Diverse local infant food Ingredients are available

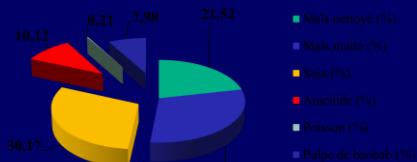




## WP3. Formulation of infant flours



• LFR selection/combination can vary/zone



Nutritional quality of formulated foods

Type	EnergKcal	Protéines	Lipides	MS	pH
1	437,5	20,64	15,42	93,20	5,28
2	499,22	19,34	-	93,08	5,31
3	503,76	16,02	15,19	94,09	5,25
Norme du Codex alimentarius	400 Kcal	15-22g	10-25g		

Micronutrients content of formulated food

Type	Ca	Fe	P	Zn
	[g/kg]	[mg/kg]	[g/kg]	[mg/kg]
1	1.48	211,0	4,69	27,0
2	2,15	230,0	5,10	30,0
3	1,40	175,0	4,51	28,0
R2	5,19	82,0	4,32	30,0

Safety issues

Pesticides residues in ingredients

Echantillons	Matières actives détectées	Concentration en mg/Kg	Pesticides concernés
Mais	Profenofos	0,037	Lambdacal, Profenofos, Sharp shooter
Sorgho	Chlorpyrifos	0,017	Nurelle D, Potialetist, Polin lamfos, KD Plus, FARIA PERMFOS, Dursban 4E, Actalm Super
Soja	Atrazine	0,017	AtraForce, Atraz, Atrazila, Gotrazine, Sun Atrazine (herbicides)
	Chlorpyrifos	0,017	Nurelle D, Potialetist, Polin lamfos, KD Plus, FARIA PERMFOS, Dursban 4E, Actalm Super
Arachide	--	--	--
Niébé	Cyhalothrin-Lambda	0,028	ACER 35 EC, Kartodim, KD Plus, K Optimal, Lambda, Lara Force, Lambdacal, Lambda Finer, Lambda super, Lamber

Pesticides	Matières actives	Cultures recommandées		Cultures contaminées
		Cultures recommandées	Cultures déclarées	
Lambdacal	Profenofos	Coton	Coton	Mais
Profenofos	Profenofos	Coton	Coton, soja	Mais
Sharp shooter	Profenofos	Coton	Coton	Mais
Nurelle D	Chlorpyrifos	Coton	Coton, niébé	Sorgho et Soja
Potialetist	Chlorpyrifos	Coton	Coton	Sorgho et Soja
Polin lamfos	Chlorpyrifos	Coton	Coton, soja	Sorgho et Soja
KD Plus	Chlorpyrifos	Coton	Coton, Soja	Sorgho et Soja
FARIA PERMFOS	Chlorpyrifos	Coton	Coton	Sorgho et Soja
Dursban 4E	Chlorpyrifos	Palme à huile		Sorgho et Soja
Actalm Super	Chlorpyrifos	Riz		Sorgho et Soja
ACER 35 EC	Cyhalothrin-Lambda	Coton, soja, niébé		Niébé
Kartodim	Cyhalothrin-Lambda	Cultures maraîchères		Niébé
K Optimal	Cyhalothrin-Lambda	Coton et cultures maraîchères	Cultures maraîchères	Niébé
Lambda	Cyhalothrin-Lambda	Cultures maraîchères	Niébé et cultures maraîchères	Niébé
Lara Force	Cyhalothrin-Lambda	Légumes et légumineuses	Niébé (légumineuses) et cultures maraîchères	Niébé
Lambda Finer	Cyhalothrin-Lambda	Cultures maraîchères	Toutes cultures (Niébé)	Niébé
Lambda super	Cyhalothrin-Lambda	Cultures maraîchères	Toutes cultures (Niébé)	Niébé
Lamber	Cyhalothrin-Lambda	Coton, niébé, Soja	Soja	Niébé
AtraForce	Atrazine	Mais, ananas, canne à sucre, igname	Mais, ananas, canne à sucre, igname	Soja
Atraz	Atrazine	Iname, Mais, Sorgho,	Mais, sorgho, igname	Soja
Atrazila	Atrazine	Mais, Sorgho, R et T	Céréales, R et T	Soja
Gotrazine	Atrazine	Mais, Sorgho, mil	Céréales	Soja
Sun Atrazine	Atrazine		Mais	Soja

## What remains?

---

**WP5. Pilote production**

**WP6. Certification**

**WP7. Dissemination**

## Conclusion

- 138 promising local food ingredients identified, characterized and mapped by agroecological zones of Benin
- 12 nutritional Maps realized for the local food ingredients of Benin
- 03 novel food formulas developed: 1 for industrial exploitation and 2 generic formats for agroecological zones
- 01 launching workshop; 04 steering committee meetings and 03 follow up meetings organized
- 02 participatory sensorial evaluations of developed products realized
- 03 manuscripts prepared for publication in refereed scientific journals
- 03 posters prepared for presentation at international workshops

**Thanks!**

