



LANN: Linking Agriculture, Natural Resource Management and Nutrition



James Zwier - ECHO Asia Conference October 4, 2011

Photos: Jutta Krahn



What is LANN ?

- Acronym for Linking Agriculture, Natural Resource Management and Nutrition
- LANN is developed as a community based approach to nutrition for upland minority communities
- Coalition of 9 INGO projects from Agrisud, CARE, CCL, CRWRC, GAA/WWH, Helvetas implementing same village training approach (in cooperation with WCS)
- Joint approach includes implementation and monitoring of activities in a spirit of partnership and shared responsibilities.



Objective of LANN

Improve food security among the poorest by facilitating the development of food and nutritional strategies at the household and community level



Photos: Jutta Krah

Food Security is ...

... more than rice security

Food security is achieved, when adequate food (quantity, quality, safety, socio-cultural acceptability) is available and accessible and satisfactorily used and utilized by all individuals in all regions, at all times to live a healthy and active life.

World Food Summit 2001



Target areas of LANN

4 Pro-
vinces:

- Odoumxay, Phongsaly, Xieng Khouang, Sekong

13
Districts

- Nga, La, Namor, Xay, Gnot Ou, Khua, Mai, Khoun, Kham, Nonghet, Viengkham, Dakcheung, Lammam

236
villages

- about 10-30 villages per INGO project (year 1)

12 ethnic groups

LANN has also been
implemented in Cambodia

Inputs and outputs of LANN

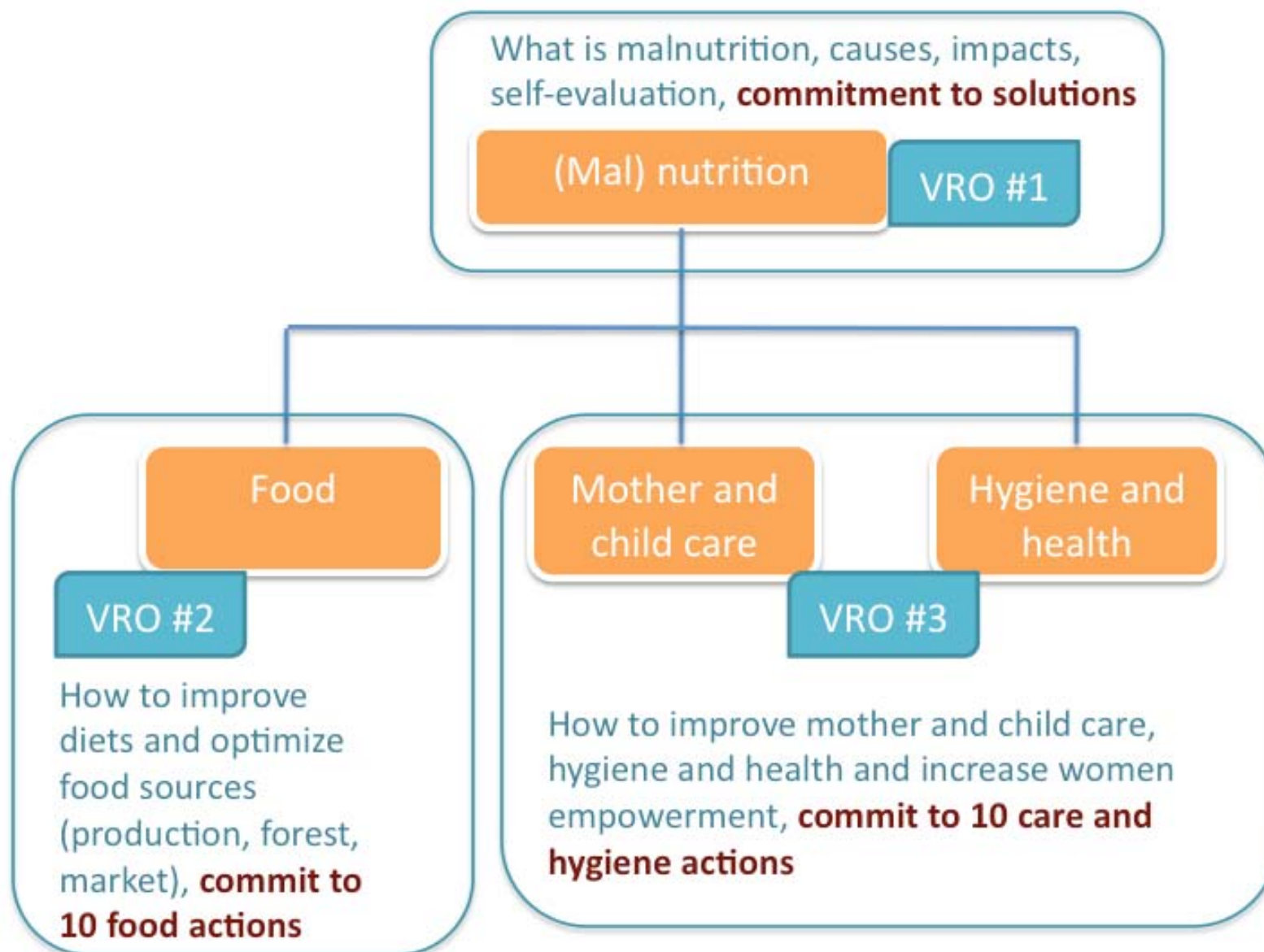
Inputs: Cooperation on contracting

- International and local consultant for concept, design, training of trainers and remote trouble shooting

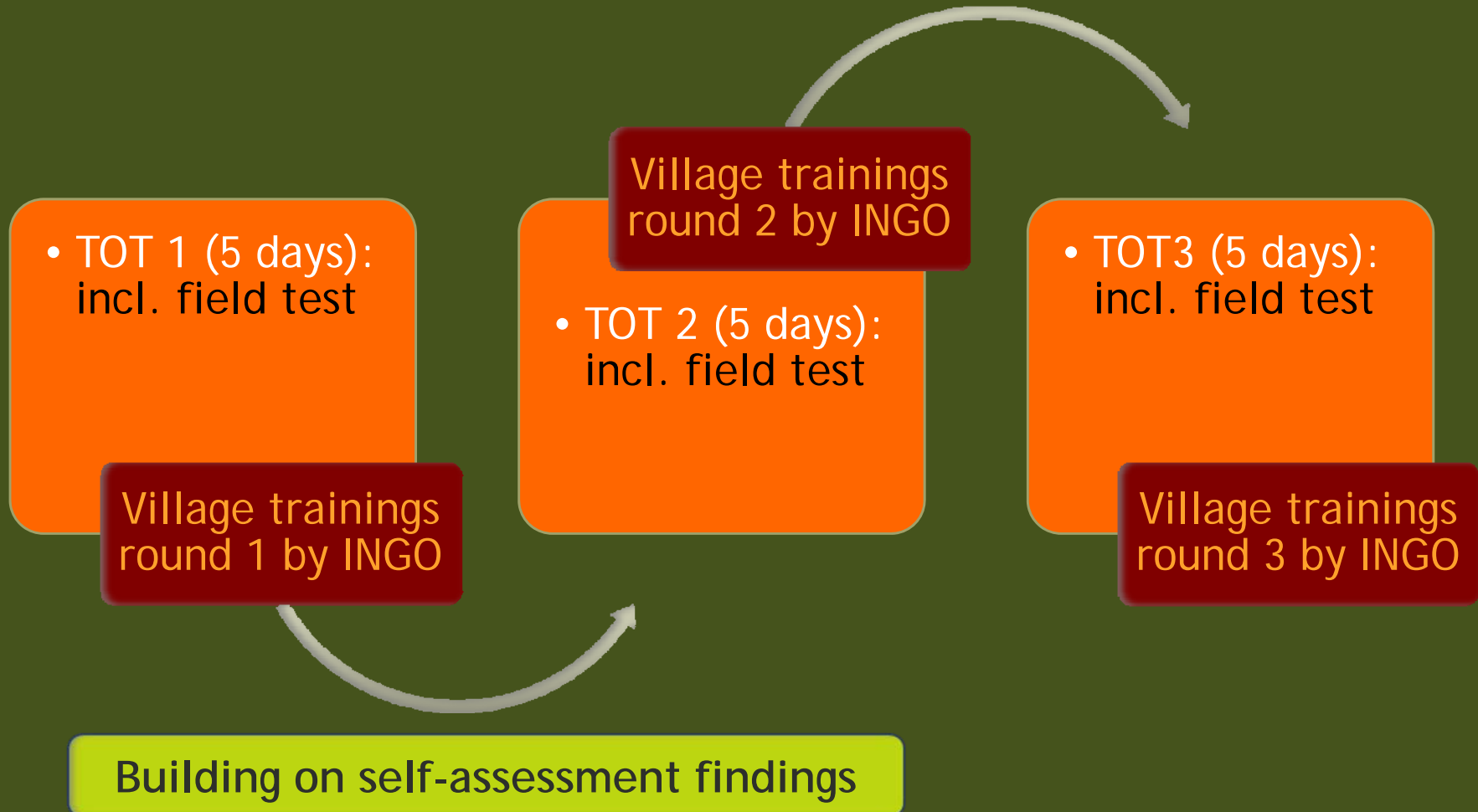
Output: Signatory partners of LANN MoU will have

- Completed training approach and training toolkit, knowledgeable trainers, lesson learned

Overview of LANN village trainings # 1-3



Training process



Outcome of LANN



Participants in LANN village nutrition trainings will

- 1) understand their family nutrition problems in practical terms (*self-assessment*)
- 2) take appropriate action to address them (e.g. at the cooking pot, agricultural production, natural resource management, hygiene, mother and child care)

Time line of LANN

- November 2009: founded
- January - March 2010: TOT 1 and village roll outs
- March - May 2010: TOT2 and village roll outs
- June - July 2010: TOT3 and village roll outs
- **After August 2010**
 - Technical “lesson learned workshop” (EC/GoL)
 - Sharing LANN training tool-kit (LAOFAB and Lao44)
 - Scale-up



Strength of LANN

- Training total of 40 staff (INGO, GOL) from different backgrounds (agriculture, health, gender, etc)
- Each INGO can adapt village training tool kit to local situation (language, culture) and trainer capacity
- Innovative and effective tools for village roll-out
- Robust lesson learned from joint M&E (more than 200v)
- Cost-effective
- Linking behaviour change at cooking pot with food production, NRM and food purchase



Linking agriculture, NRM and nutrition



LANN opens opportunities and encourages

- 1) production of nutritive plants,**
- 2) managing wild animals and plants,**
- 3) informed food choices at market and increased savings**

Example of village activities



1. Own
production: Foods
good to eat



2. Wild collection:
Hunting/collector game



3. Purchase:
Market game

Six food groups
per day

and

8-10 glass
of water (2l)



Have diversity within food group

- Diversity in foods increases the chance the get enough from all nutrients
- Example vegetables: fern is rich in beta carotene, mushrooms are rich in iron
- Example staples: rice is missing one amino acid which is found in corn
- Example fruits: mango is rich in beta carotene, guava is rich in Vitamin C



How much of what per person per day

- By eating a certain amount of food from each food group your body will get all the nutrients needed
- Examples:
 - Eating 700g of rice (cooked) you will likely to get enough energy (calories)
 - Eating 200g of fruits you will likely to get enough Vit C (if your fruit intake is diverse and you also eat enough vegetables)



1. Staples



or



700g of cooked rice

Food substitution: rice

For energy intake 700g rice (cooked) is equal to



Corn: 2kg (cooked with cob)

or



Cassava:
1.2kg (raw without skin)



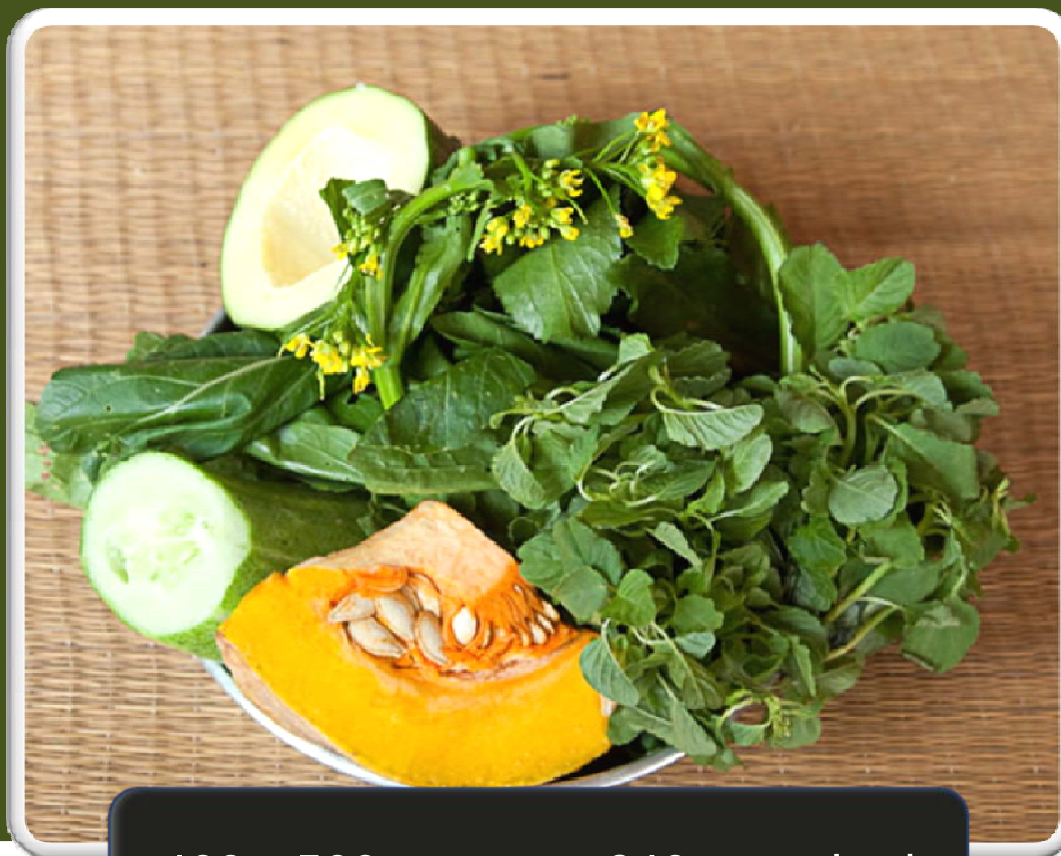
1.8 kg banana (with skin)





2. Vegetables

leafy vegetables + non-leafy



400 - 500g raw or 240 g cooked

Prepared by Jutta Krahn and Vanida Philakhone

3. Fruits



80g Vit C per cap/day,
female, 20 years

100 - 200g or 4 portions

Prepared by Jutta Krahn and Vanida Philakhone





4. Meats, fish, eggs, plant alternatives



or



57g protein per
cap/day, female,
20 years

100-200 g total raw

Food substitution: domestic meat/fish/eggs

200g of meat or fish with 40 g protein is equal to

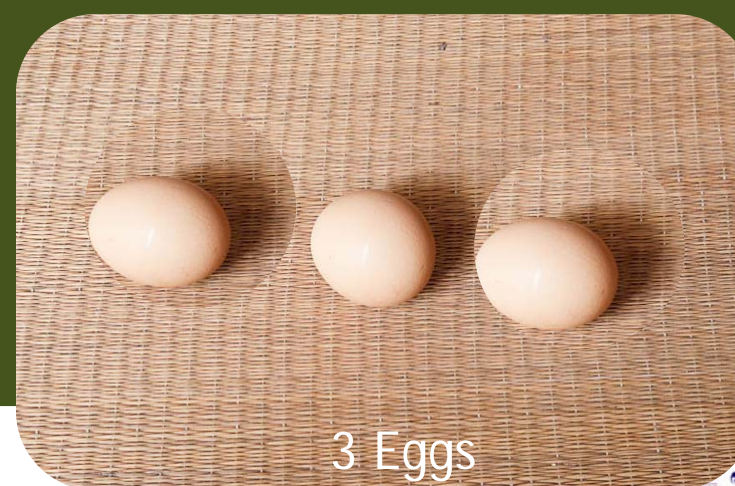


Peanuts: 130 g

or



Soybean (dried): 120 g



3 Eggs

5. Ca-rich (bone-building) foods

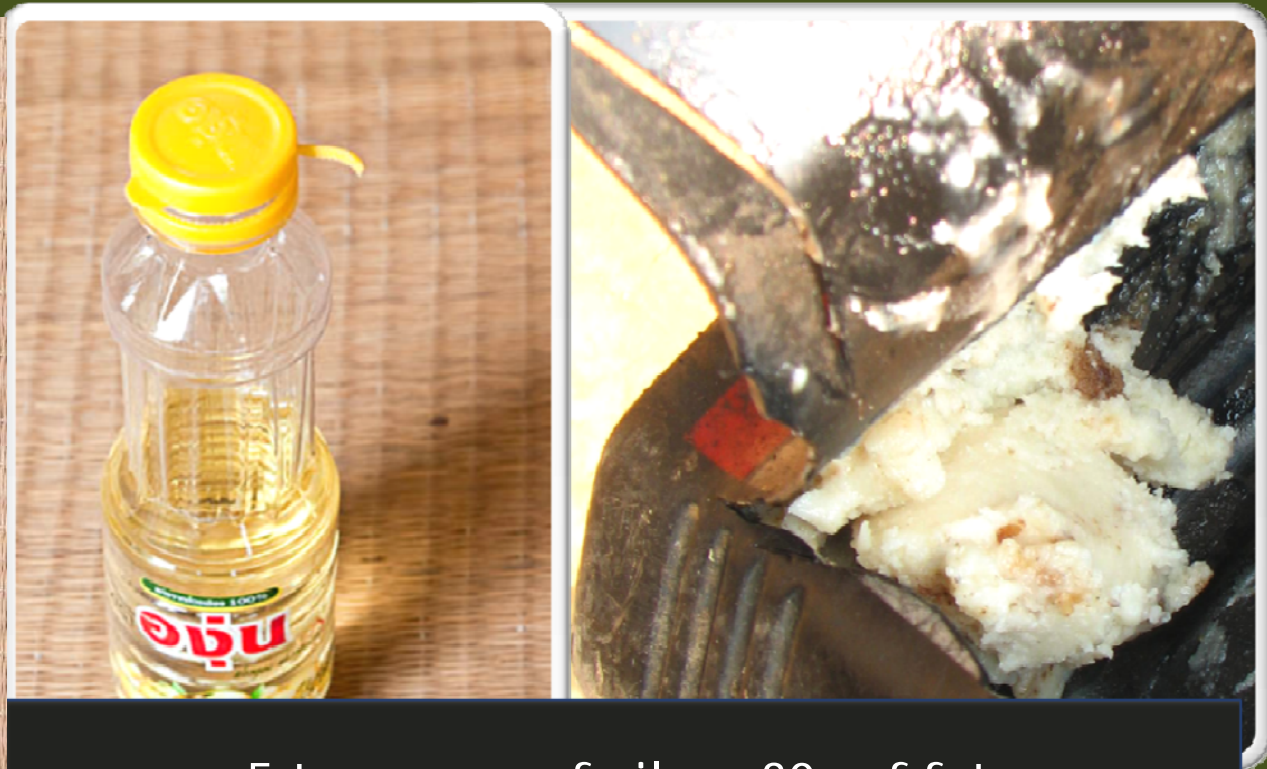


800mg Ca per
cap/day, female,
20 years

2 spoons of small bony fish or insects



6. Oil/fats



5 teaspoons of oil or 30g of fat

Food substitution: Vegetable oil or lard

30g of soybean or peanut oil (fat) is equal to



Peanuts: 100g



Coconut (grated): 100g

or



Sesame: 50g



Sunflower seeds: 60g

Combining food groups

Nutrients work best in pair (hand-in hand)

- Green leafy vegetables, fat
- Green leafy vegetables, lemon
- Staples, beans, seeds

Adverse impacts from foods

- High phytate intake
- Sweets can destroy nutrients

Example: getting 6 food groups even on a lean day

- What to do if you have no fresh food available or just left-overs (cold rice and nothing else) ?
- Be prepared for such days (always have dried or fermented foods available)
- Use rice water (soaking) and make soup (nutritional superior to just rice with cheo)
- Example for quick and easy dish with few ingredients: Fry left-over rice with corn or other roots/tubers, add fresh herb, add peanut or insects

Available resources



Photos: Jutta Krahn

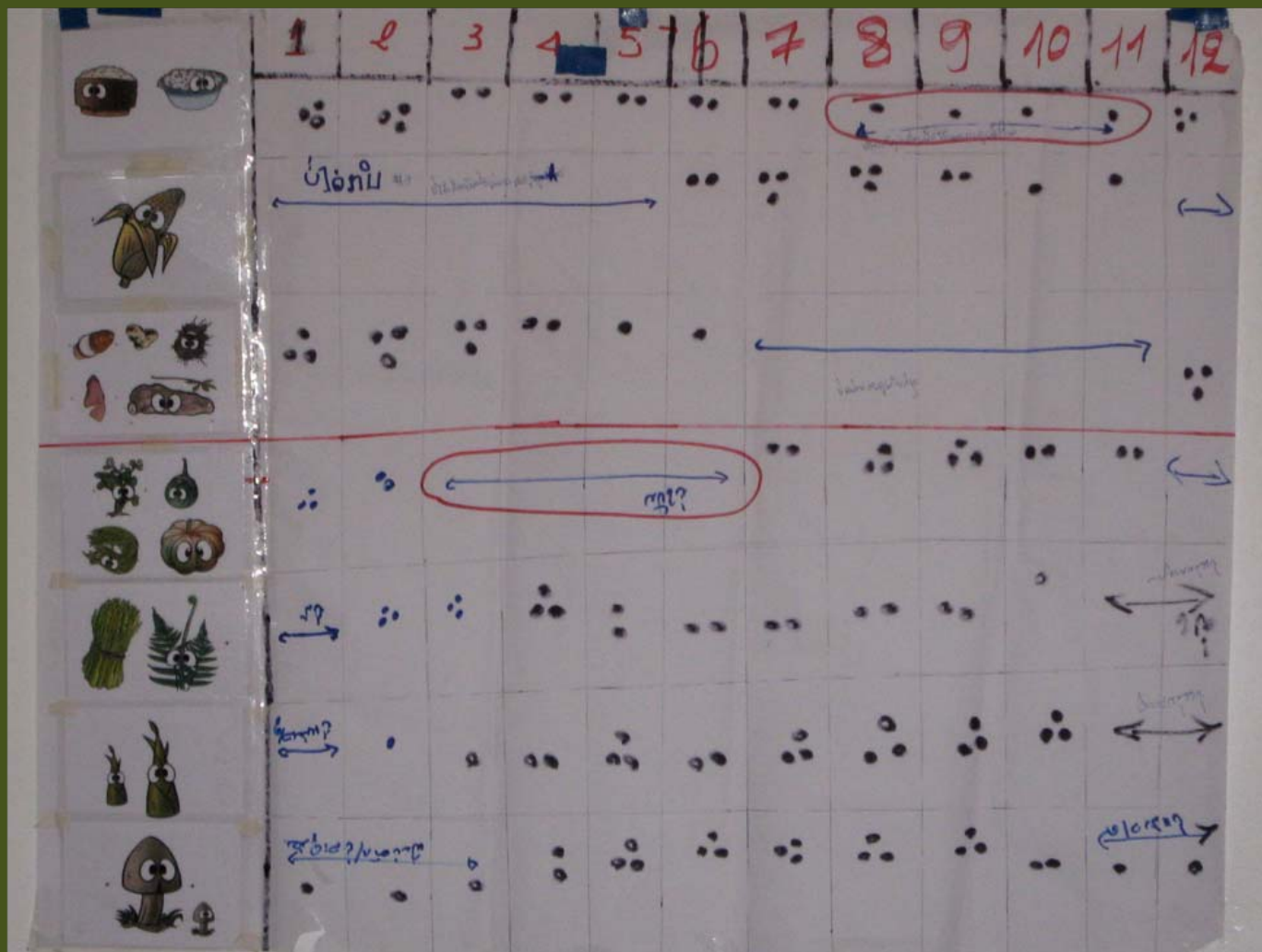
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Ranking food sources: produced, purchased, and wild



Food availability calendar



Food availability calendar



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