An integrated approach to WASH and poultry farming in Burkina Faso - experience from the SELEVER project

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Supporting Family Farming to Launch Poultry Farming and Enhance the Rural Economy

IFPRI + AFRICSanté are responsible for impact research in the SELEVER project
The SELEVER project is a nutrition-sensitive intervention, promoting poultry production by women and communication for behavior change on good nutrition practices (2016-2021)

The objective: Reduce the prevalence of malnutrition

The problem: poultry production in an uncontrolled manner risks aggravating the already precarious hygiene conditions in rural Burkina Faso and limits the achievement of the project's objectives.

- Hygiene is considered a key tool to reduce diarrhea and enteropathy and therefore also malnutrition.
Indeed, previous studies and a formative research conducted in 2016 by IFPRI in the three (3) intervention regions have shown that:

- Children and poultry shared the same spaces in 91% of households.
- In 69% of households, the compound required sweeping at the time of the survey and chicken droppings were visible in 70% of households.
- Only 59% of households had a functional latrine.
Human excreta was visible in 6% of households.

In 58% of households, livestock had access to the main source of drinking water.

Observations of mothers and children revealed:
- 72% of mothers had hands that looked clean, compared to 37% of children.
- 58% of the children defecated in the open.
- The faeces of only 13% of children had been thrown into a latrine.

Low practice of hand washing at key times

Weak drinking water protection or water treatment
Approach

- The main intervention in the SELEVER project concerned the strengthening of local poultry production.
- In addition, a WaSH component was implemented for half the intervention villages (WaSH sub-study).
- In the WaSH villages, a CLTS approach with an additional livestock component was designed and used.
- Contracting of a local NGO (APS) specialized in CLTS for this activity.
79 communes available for scale-up in 3 regions

60 municipalities selected for the study

1st level of randomization:
Trial comparison
[SELEVER – Control]

2nd level of randomization:
Trial comparisons
[SELEVER + WASH vs SELEVER ]
[SELEVER + WASH vs Control]
[SELEVER vs Control]

Control
30 municipalities
60 towns

Control
15 municipalities
30 towns
Study municipalities (SELEVER + Control)

Source: Gelli et al. 2017)
SELEVER WaSH intervention:
→ CLTS model + poultry risks

- In addition to the traditional model of CLTS based on the management of human waste (construction + use of latrines), the management of poultry manure has been taken into account in the process:
  - Quantification of animal droppings during triggering,
  - Search for animal droppings during the environmental walk
  - Taking animal droppings into account when mapping excreta
  - Use of animal droppings in the disgust test
  - Estimation of health expenditure due to diseases linked to poultry droppings
CLTS/Poultry stages

- **Prospecting stage:** Village visits, meetings with village leaders etc.

- **Pre-triggering** – collect key information, announce triggering visit etc

(details in annex-slides)
The triggering has seven (07) steps carried out in one day:

1- **Village map** where the emphasis is on defecation areas and animal droppings (very dirty map at the end);

**Map made by adults**

**Yellow:** human poop in the bushes,

**Red:** human poop around compounds,

**Black:** animal droppings

**Map made by children**
2- The Poop Calculation consists of calculating the quantity of poop produced by the community and the quantity of animal waste per day, per week, and per year;

3- Transect walk to defecation areas
- Visit places of defecation (open air, latrine, water point, etc.);
- Encourage and ask comprehension questions while avoiding guiding the community;
- Visit some compounds in order to appreciate the state of hygiene and to see the way in which domestic livestock are managed.
4- The exercise of the glass of water / contamination of poo → food
5- Calculation of medical expenses, consists of asking people how much they spend on health treatment from faecal related illnesses (diarrhea, typhoid fever, dysentery, etc.);

6 - Children's Advocacy
After the child trigger, two (02) or three (03) children will speak on behalf of all to convey their message to their parents.

The parents will, in turn, give an answer to the children who will return to sit down to follow the rest of the activity in the adults
7-Commitment and decision-making

- After analyzing their situation, the community agrees to stop open defecation.
- They raise their hands and pledge to build latrines.
- Early adherents are listed on site and will be closely monitored.
CLTS/poultry stages – post triggering

- **Post-triggering follow-up**
  - Establishment of village monitoring committees (CAVQ)
  - Training of CAV/Q members on good hygiene and sanitation practices to promote
  - Follow-up of latrine achievements,
  - Follow-up of the achievements of adequate poultry houses
  - Separation of animal habitats from compounds
  - Monitoring of spaces equipped for children,
  - Regular cleaning of yards,
  - Use of latrines and defecation pots for children
  - Water Protection
  - Hand washing at key times with soap
Results

- The WASH approach used has contributed to improving knowledge and promoting the adoption of good hygiene practices related to poultry farming.
- Some practices related to the separation of poultry and children have also improved.
- However, it was also shown that non-livestock WASH practices did not improve in the SELEVER+WASH group.
- These communities had very low levels of WASH to begin with and improving WASH in these communities will likely require further interventions, including infrastructure improvements.
- Analyzes of biomedical indicators are in progress.
Lessons learned (1)

- The WASH approach of the SELEVER project is an innovative extension of CLTS that has potential to address the local sanitation and hygiene and contribute to sustainable development.

- Strong interest of the population in solving problems related to hygiene.

- Awareness of the health risks from a contaminated local environment, including cohabitation with animals.

- Commitment to the construction of latrines and chicken coops.

- Construction of many latrines with local materials (wood for the slabs, straw for the fences).

- Reinforcement of social cohesion through many activities which bring together several sub-communities in the village assemblies (triggering, training of CAV/Q, village restitution, etc.).
Lessons learned (2)

- Testing ways to separate livestock from human habitats
- Community monitoring through village sanitation committees.
- Positive influence on neighboring villages of the triggered villages
- Droppings and other animal waste that are regularly swept up and grouped together are sold for market-gardening or used as compost in the fields.
Limits/Difficulties (1)

- Insufficient funds for reinforced and fairly extensive monitoring
- Absence of subsidy especially for the poorest for infrastructure construction (latrines, chicken coops)
- Construction of latrines with poor and unsustainable material (wood for the slab, straw or plastic bags for the walls)
Limits/Difficulties (2)

- Limited adoption of separating animals from domestic areas due to fears of theft, and the mode of poultry feeding (free ranging). The low practice of animal separation is also due to the lack of resources for the construction of adequate pens (wire fences).
- Threat of deforestation (by the use of tree trunks) for manufacture of latrine slabs.
Next steps...

- Ongoing analysis of final data (interviews and biomedical samples) in Control / SELEVER / SELEVER+WaSH villages
- WaSH report to be finalized during 2022
- Journal publication will follow
Thank you!
Details of the prospecting stage (1)

- Visit of selected villages (30)
- Contact with the leaders of each village
- Brief presentation of the WASH component of the SELEVER project
- Advocate for the mobilization of village and association officials, leaders for the pre-triggering process
- Programming the pre-trigger date
- Interviews in some households
- Observations and appreciation of basic sanitation and husbandry hygiene practices
Details of the pre-triggering stage (2)

This phase begins with information gathering. This involves making one or two visits to the locality to:

- Collect all useful information (general information, social organization of the village, existing collective equipment, functional sanitary installations, collective organization);

- Announce the visit of a delegation (triggering team and observers);

- Advocate for the mobilization of the whole community (men, women and children) for a successful triggering;

- Agree on a date and time for the arrival of the delegation for the triggering.