

## PHOTO ESSAY: FMNR RESTORES TERMITE HARVESTING AS POULTRY FEED IN TALENSI, GHANA

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*A majority of smallholder farmers in the Talensi District in Upper East Region of Ghana give termites to their poultry as supplementary feed, but the quantities available have reduced over the years due to rampant perennial bushfires and environmental degradation. The World Vision Ghana and World Vision Australia Collaborative Farmer Managed Natural Regeneration (FMNR) Project, being implemented in the district since 2009, strengthened community management of bushfires leading to drastic reduction of bushfires in project communities. Now, termites have returned to the area and are easily available near homesteads for farmers to trap to feed their chickens and other domestic birds. The practice has boosted indigenous poultry production as a key livelihood activity for poor rural farm households. This photo essay presents the benefits of fire prevention vis-à-vis the practice of termite harvesting to feed indigenous poultry, and describes the step by step process of traditional termite harvesting in the project communities.*

Indigenous poultry rearing in the Talensi District of Northern Ghana, where the Talensi Farmer Managed Natural Regeneration (FMNR) Project is being implemented, plays a very important role in rural livelihoods diversification. Almost all households in the current 77 project communities keep some chickens and guinea fowls as a source of income, meat and eggs for nutrition. Poultry is also kept for socio-cultural purposes, especially during marriage and funeral ceremonies as well as for traditional religious rituals. Money earned from poultry and eggs sales is used to pay school fees, buy food during the lean season and for meeting other basic household needs.



The rising cost of commercial poultry feed is a major constraint to indigenous poultry production in these rural project communities. As a result, farmers have traditionally harvested termites free from the bush as a source of protein feed for chickens and chicks. It has been proven that termites compare favourably with fish meal, which is the main animal protein source in poultry diets<sup>1</sup>. In Talensi, termites harvesting is an age old practice for sourcing feed for indigenous chickens and guinea fowls. “When I was a teenager, my father used to trap and harvest a lot of termites from our compound farms to feed our fowls, says a 67-year-old farmer (Yinsigan Yamga) of Shea Dazore community.

Yinsigna said his family had a lot of fowls in the community then, which translated into wealth because they would sell some during difficult times to meet family needs. He said fowls fed with termites have good body weight, which fetches good price in the market. However, over the years termites have almost disappeared in our communities due to perennial bushfires, he lamented. Indiscriminate bushfires in the past destroyed termite colonies, their food supplies and habitats, resulting in termite population crash. This reduced the availability of termites as a reliable and cheap source of poultry feed. Evidence suggests that populations of termites and other soil insects tend to decrease drastically shortly after burning due to high temperatures, and

<sup>1</sup> Tiroesele, B., & Moreki, J.C. (2012). Termites and Earthworms as Potential Alternative Sources of Protein for Poultry. *IJAVMS*, Vol. 6 (5): 368-376.

following years of continuous burning<sup>2</sup>. In the project communities, households harvest termites to feed chickens by breaking small termite mounds with hoes or by trapping them with containers and clay pots filled with organic matter such as cattle dug or dry corn cobs. This photo shows a termite mound broken. The cessation of bushfires and restoration of degraded landscapes since 2009 when FMNR was introduced in Talensi has restored the termite population. The farmers have lauded World Vision for increasing the availability of termites in their communities, explaining that this has reduced the long distances people have had to travel in order to collect termites.



The bushfires control and prevention intervention of the FMNR project has significantly reduced the prevalence of wildfires in the Talensi district, creating favourable conditions for termites to return. From the project inception to date, bushfires have decreased by around 90% in project communities, says Samuel Abasiba, the Project Manager. It is now common to see many termite harvesting containers placed out in restored bushland and on farms. Today poultry are better nourished and command a better price than previously. In this photo, a farmer in Yameriga Village, explains to Tony Rinaudo how termites are collected as poultry feed during his recent working visit to project communities.

### **Step by step process of harvesting termites as poultry feed**

The local farmers are very knowledgeable on the types of termites to harvest as chicken feed since some termite species are either poisonous or could kill chicks in particular through biting. The *Microtermes (small-size termites) species* are commonly collected to feed chicks in the project area. Thus, the method described below is mostly used to harvest the small-sized termites. The steps involved is very simple and can be carried out by any member of the household, including women and children. The typical materials used as bait to trap termites are dried cow dung, maize cobs, millet stalks and sorghum stalks. This type of termites, which are rich in protein, are usually fed to chicks to speed up their growth.



<sup>2</sup> Peterson, C.J. (2010). Review of Termite Forest Ecology. *Sociobiology*, Vol. 56 (2).

## STEPS OF HARVESTING TERMITES BY FARMERS IN THE PROJECT COMMUNITIES

1. Farmers use clay pots, empty tin cans and plastic containers to trap and harvest termites.



2. The farmer fills the tin/pot with crushed pieces of dried cow dung or other suitable material such as corn cobs which are sought out by termites, and sprinkled them with water.



3. The farmer scouts for termite galleries in fields. A shallow pit about  $\frac{3}{4}$  the depth of the tin/pot is dug and the container is turned upside down with the opening on the termite gallery. The container is shaded from the sun with leaves or grass and a rock placed on top to create an ideal microclimate within for the termites.



4. Termites enter the tin/pot and are most concentrated in the mornings. The tin/pot is emptied very early in the morning after 1-2 days. The termites are poured into a bucket or basket and sent home to feed chickens, guinea fowls, chicks and keets (young guinea fowls).

