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## Equipping Farmers to Seek Animal Health Care in a Changing Market

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### Abstract

African agriculture remains heavily dependent on livestock and severely constrained by livestock disease. In the newly liberalised and privatised economies, managing non-notifiable veterinary diseases is now largely the responsibility of the individual farmer. However auto-medication can result in incorrect treatments causing economic loss, drug resistance and negative impacts on human health. A BMZ-funded project working in Burkina Faso, where trypanosomosis is the most important cattle disease, has the objective of better managing trypanocide resistance. To investigate farmer behaviour that could lead to drug resistance, Participatory Rural Appraisals (260 participants) and questionnaire surveys (348 respondents) were carried out. These showed that drug use in the community by non-professionals was widespread (80.1 %), as were misconceptions on drug use (43 %) and overuse of drugs due to poor diagnosis (64 % of farmers ignorant of specific signs). Under-dosage is a particular cause for concern, as this is a major factor in development of drug resistance: we found 10 % of cattle received under-dosage of diminazene drugs and 21 % under-dosage of isometamidium (ISMM) drugs. At the same time alternatives to drug use (i.e. control of the insect which transmits trypanosomosis and use of trypano-tolerant breeds) were little known and less practised. Only 53.2 % of farmers were aware of insect control and none practised it, while trypano-tolerant animals have been largely replaced by exotic cattle and their crosses (95.6 % of farmers keeping these). A further survey on farmers' needs and sources for information (n=100), showed that training, extension leaflets and sellers of drugs are the most-preferred sources (together comprising 80.9 % of first preferences). To develop information packages, choice tests were carried out to find farmers' preferred type of illustration, font and type size and farmer understanding of symbols, dates and abbreviation. Combining findings on information needs and preferred channel /format of information, we produced exemplars of informational material for farmers. Firstly a picture book covering cattle diseases, drug use, vector control, and nutrition in local language, secondly an extension leaflet on Rational Trypanocide Use and thirdly a series of posters/calendars on drug use and promotion of trypano-tolerant breeds. Testing showed these were comprehensible and effective in increasing farmer knowledge.

**Keywords:** Drug resistance, extension, rational drug use, Trypanosomiasis