



Beef Market Chain and Opportunities for Farmers in Kampong Cham Province, Cambodia

MIRANDA PEN*

*University of New England, Armidale, Australia
Email: mpen@myune.edu.au*

DARRYL B. SAVAGE

University of New England, Armidale, Australia

SOPHAL LORN

Department of Agriculture, Kampong Cham, Cambodia

WERNER STÜR

Farm and Agricultural Advisory Services, Queensland, Australia

Received 26 December 2012 Accepted 26 July 2013 (*Corresponding author)

Abstract Most cattle raising in Cambodia is undertaken by smallholder farmers, based on a system of low nutritional input (crop residues) and high labour input. Options for increasing efficiency and introducing a market-oriented beef production system are considered a priority. This paper reports the outcomes of a cattle market chain study conducted in Kampong Cham province. Three districts were selected: Prey Chhor (paddy area), Tbong Khmum (highland area) and Kang Meas (Mekong area). A rapid market appraisal was conducted by following the market chain from producers to traders. Farmer groups, cattle brokers and small, medium and large traders were informally interviewed. Farmers in Prey Chhor frequently bought and sold draft cattle as a seasonal cycle for rice cropping. Farmers along Mekong area practiced a form of market-orientated production, buying thin cattle from other districts to fatten and sell. At all points of the market chain, interviewees reported that kilogram of meat was the basis of price. Interestingly, sale of raw meat at market (retail) is the only stage of the market chain at which weighing of meat takes place. At all other stages of the market chain, assessment of weight is undertaken by visual assessment and is therefore only an estimate. For breeding animals, their physical appearance rather than production-based measurements is the basis of price. Importantly, meat eating quality was not identified an issue of importance by farmers or cattle traders.

Keywords draft cattle, market chain, cattle production system, smallholder farmers

INTRODUCTION

Demand of meat is the primary driver for a livestock revolution, and in developing countries, poor people are consuming more animal products due to their increased income and urbanization (Dalgado, 2003). With projected population of 0.7 billion in 2005 and 0.9 billion in 2050 in Southeast Asia (SA) (Haub and Kaneda, 2012), annual growth of meat consumption during 1997–2020 is expected to be 3.4% per year in SA and 3.1% per year in China (Dalgado, 2003), where meats are exported to.

As one of the ASEAN (Association of South-East Asian Nations) countries, Cambodia will enter into one economic zone so called ASEAN Economic Community (AEC) by 2015 (ASEAN, 2012). This will promote more opportunities for Cambodia to increase its participation in export markets. However, there are challenges for the Cambodian producers to compete with other countries related to product quality and supply issue.

Cattle population in Cambodia was 3.4 million in 2011, down from 3.6 million in 2009 (MAFF, 2012). Cambodia has had relatively high growth rates of meat production (7.7%) and

consumption (8.6%) since the 1980s (Ahuja, 2012). However, cattle production of the Cambodian farmers is still small in number and is based on low nutritional input and high labor demand (Pen et al. 2009; 2010). Problems resulting from parasites and diseases are still severe for the Cambodian cattle herd (Copeman and Copland, 2008, Nampanya et al., 2011). Interventions to develop livestock sector in this country are very crucial to respond to the market opportunities.

Current cattle markets for the Cambodian livestock are mainly in local markets and in Vietnam, China and Thailand (Sieng et al. 2012). The cattle trading within the country is still modest and is laid in an extensive and traditional system. The understanding of cattle market chain among the farmers and traders will have an implication for cattle development in the country for income generation of smallholders and national economy. There have been studies to understand the livestock movement and disease spreading in Cambodia (Sieng et al. 2012; Kerr et al. 2012; Hawkins et al. 2012), that influenced the focus of the study reported in this paper.

OBJECTIVE

This study aims to analyze factors involving in beef market chain in Kampong Cham province of Cambodia and to discuss the opportunities for them to gain more participation in cattle markets.

METHODOLOGY

A rapid market appraisal (RMA) was used to collect data for this study. Informal interviews and meetings with farmers, brokers and traders were undertaken in Kampong Cham Province, Cambodia. This study were prepared by previous project funded by the Australian Center for International Agricultural Research (ACIAR), namely ACIAR project AH/2003/008 'Improved feeding systems for more efficient beef cattle production in Cambodia'. The project had defined three main sites for testing the adoption of forage planting and developing cattle fattening system. With the assistance of local extension workers for agriculture and head of districts, Prey Chhor (paddy area), Tbong Khmum (highland area) and Kang Meas (Mekong area), were selected based on its topography and agricultural activities. In each of the sites, there were 15 smallholder forage adopted farmers (referring to those who have less than 10 heads of cattle) to join and a series of questions focusing on cattle production purpose, breed selection, buying and selling activities, were asked. Farmers were allowed to discuss and to share their responses while all information were recorded and analyzed by the interview team. Breed type were discussed in the interview process, however, due to inconsistency of definition of breed-type, this data was discarded in the result section.

Five cattle brokers from each site were informally interviewed individually on cattle market network, cattle price and trading margin. With the help of the brokers, three levels of traders were identified: small, medium and large traders based on numbers of cattle traded. Ten smalls traders at commune level (buy and sell cattle; 15 cattle/month), 8 medium traders at district level (up to 60 cattle/month), 6 large traders at provincial level (300 cattle/month) were contacted and interviewed separately. They were invited to the Department of Agriculture in Kampong Cham Province to provide information related to cattle price and trading margin, trade flow and their perspectives on cattle market chain. The data are presented in form of flow chart and tables.

RESULTS AND DISCUSSIONS

Cattle Market Chain of Smallholder Farmers: An Example in Prey Chhor District

Prey Chhor District is a paddy area in the province. The cattle purchasing (Fig. 1) in this area mainly related to cropping activities (rice growing) because farmers purchased draft animal based on cropping cycle. They also purchased breeding cows from within district (for native cows) or from Kang Meas (for crossbred cows). Brokers and small traders involved more or less in cattle

purchasing in the district depending on their contacts with farmers.

Farmers in Prey Chhor sell calves, old cattle and draft cattle to the market (Fig. 1). Calves were mainly purchased by farmers within village or from nearby village. Small and medium traders played a strong role in purchasing old and draft cattle and in selling to local slaughterhouses or large traders. Large traders sold their stock to local slaughterhouses, or Phnom Penh or to Ho Chi Minh City in Vietnam.

The trade was done on unscheduled timeline with farmers, which means that it could occur anytime farmers wanted to sell their stock. Sieng et al. (2012) reported that to find stock for purchasing, traders contacted producers directly by traveling to their known sources or through phone contacts or family networks. It was clear that farmers did not produce cattle based on planned production. This becomes an issue for traders to optimize their activities on a basis of regular and steady production cycle. Hence, cattle market chain at the district level was generated in a traditional way and farmers’ awareness of market information was limited.

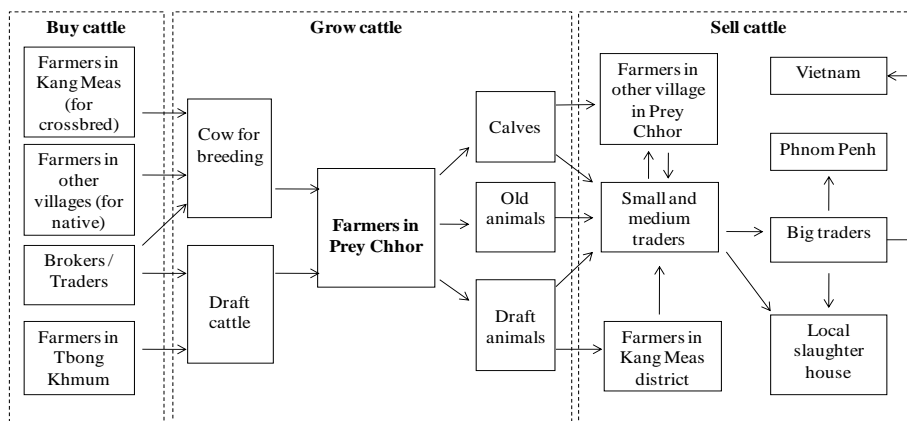


Fig. 1 An example of cattle market chain of farmers in Prey Chhor District, which is linked with other districts within the province and to market

**Broken box indicates cattle trading activities of farmers in Prey Chhor District. Arrows indicate movement of cattle within the chain.*

Table 1 Purpose of cattle production in the three project sites in Kampong Cham, Cambodia

Purpose of cattle production	Prey Chhor	Tbong Khmum	Kang Meas
Priority 1 – 2 – 3*			
Cow-calf	2	1	1
Drought	1	2	3
Fattening	-	-	2

**Information from farmer group interviews*

Purpose of Cattle Production

The purpose of cattle produced by farmers in the three project sites were different (Table 1). In Prey Chhor District (paddy area), draft power was the first main purpose, followed by cow-calf production. The later was more prior purposes in Tbong Khmum District (highland area). None of farmers fattened cattle for selling in these two districts. In Kang Meas District (Mekong area), cow-calf purpose was the first priority. Farmers also fattened cattle in this area where feed availability is abundant. As fattening cattle was one of the project objective to increase smallholder cattle herd and individual cattle price, more fattening activities was expected to achieve in others two project sites. This development towards more oriented-market supply will be achievable in case that nutrition of cattle is improved in terms of quantity and quality.

Cattle Purchasing and Selling Activities of Farmers

Farmers in Prey Chhor (paddy area) purchased draft cattle, mainly directly from farmers along the