Introduction

• Beef cow production cycle:
  – Post-partum (after calving): highest nutritional demand.
  – Lactating and pregnant: still high nutritional requirement.
  – Gestation (after weaning): lowest nutritional demand
  – Pre-calving: High nutritional demand again.

• Reproduction are based on expected calf birth weight.

• Body score at calving is critical for conception rate.

Constraints of traditional cow calf production

• Cows are kept grazing in the field almost all the time of production cycle.

• Cows might not produce sufficient milk during the early growth stage of calf because of lack of nutrients.

• Also the cows are skinny and return to estrus late.

Previous baseline study

• Natural breeding is done by all farmers in studied areas – No artificial insemination.

• Up to 80% of farmers choose a bull within village to mate the cow.

• No weaning calf, no calving timing and no feed supplement during lactating period.

• Average calving-interval is 18.6 months.

Cow Reproduction Management by Smallholder Farmers in Kampong Cham Provinces

Presented by Mr Lorn Sophal

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Department of Animal Health and Production (DAHP)
Constraints of traditional cow-calf production

- Methodology
  - Two farmers in each project site (Prey Chhor and Tbong Khmum) were selected (one forage adopter and one non-adopter).
  - The farmers had a cow and a calf born at the same date.
  - Two farmer groups were divided:
    - Forage adopter: the cow was provided planted forages and water ad libitum in pen and calf was separated at 3 months old.
    - Forage non-adopter: the cow was grazed 8 hours on field and calf was not separated from the cow.

VLA on cow-calf production - Results

- The cow in adopter group returned to estrus 1-2 months after weaning.
- The cows of non-adopter group returned after 6-8 months after the calves stopped suckling at 7-8 months old.
VLA on cow-calf production - Results

Lesson learned

- Improving feeding system of cow-calf by using good quality forages during pregnancy and suckling period to minimize weight loss of cow and shorten the time to return to the next estrus.

Conclusion and Recommendation

• Improving feeding system for lactating cow and weaning her calf at appropriate time keep the cow and its calf in good body condition and the cow returns to heat fast.

• This technique is recommended to farmers to adopt because farmers can improve their cattle production cycle and get higher income.

Cow-calf Production