



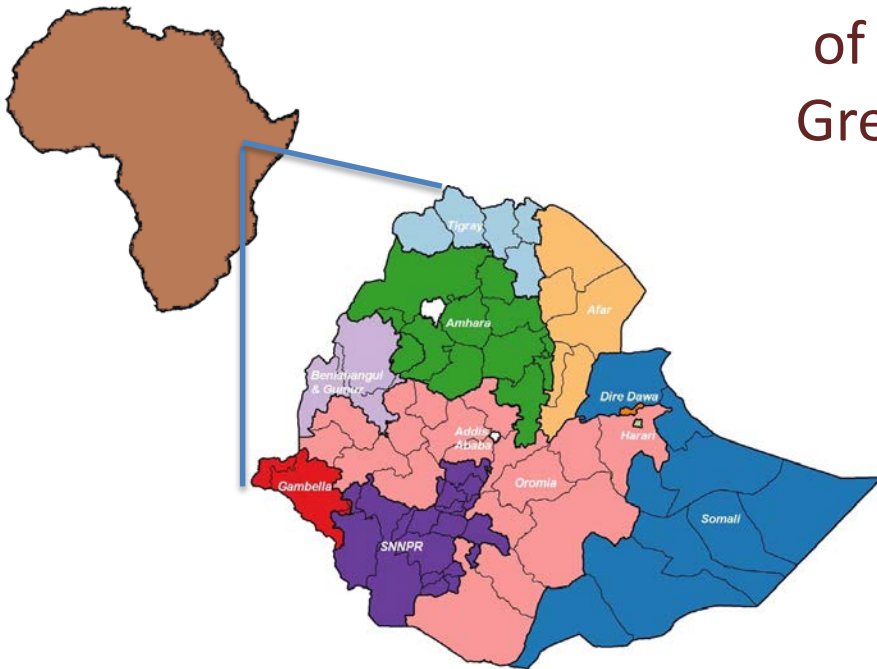
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The Missing Link: Increasing Availability of Animal Sourced Feeds Through Greater Production & Marketing of Quality Feeds

Feed Supply Through Cooperatives: *FEED* Experience in Ethiopia

C P Birkelo, PhD
Chief of Party
FEED II/III
USDA, ACIDI/VOCA



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LIVESTOCK AND POULTRY IN ETHIOPIA:

- 80 million cattle, sheep, goats, camels in Ethiopia (40 million are cattle, half of which are for draft)
- Contribute 1/3 of ag GDP/16% of total GDP
- 90% of crop production is dependent on draft animals
- 2/3 of the population depends at least in part on livestock (11.4 million households)





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| | | Total livestock population | Average annual feed consumption per head | Total feed needs (metric tonne / year) | Feed resources good year (metric tonne / year) | Feed resources average year (metric tonne / year) | Feed resources bad year (metric tonne / year) |
|--------------------|--------|----------------------------|--|--|--|---|---|
| LG + agro-pastoral | Cattle | 15,293,782 | 1860 | 28,446,435 | | | |
| | Sheep | 12,214,228 | 256 | 3,126,842 | | | |
| | Goats | 20,257,218 | 220 | 4,456,588 | | | |
| | Camels | 4,500,000 | 2586 | 11,637,000 | | | |
| | Total | | | 47,666,865 | 68,290,410 | 51,326,540 | 34,183,279 |
| MRD | Cattle | 14,796,872 | 1785 | 26,412,417 | | | |
| | Sheep | 6,048,392 | 280 | 1,693,550 | | | |
| | Goats | 4,578,885 | 190 | 869,988 | | | |
| | Total | | | 28,975,954 | 28,076,555 | 19,209,548 | 15,173,235 |
| MRS | Cattle | 23,520,401 | 2100 | 49,392,842 | | | |
| | Sheep | 11,098,505 | 275 | 3,052,089 | | | |
| | Goats | 4,115,200 | 220 | 905,344 | | | |
| | Total | | | 53,350,275 | 48,853,394 | 38,004,014 | 31,920,918 |
| Total | | | | 129,993,094 | 145,220,359 | 108,540,102 | 81,277,432 |



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| Livestock numbers 2028 | LG | MRD | MRS |
|--------------------------------------|------------|------------|------------|
| Cattle | 16,681,866 | 15,947,910 | 33,382,159 |
| Sheep | 18,575,233 | 12,429,424 | 18,865,174 |
| Goats | 36,188,226 | 9,151,560 | 6,411,348 |
| Camels | 4,706,808 | | |
| Total feed requirements 2028 TM/year | 55,916,747 | 33,686,055 | 76,700,952 |
| Feed Resources (good year; mt/year) | 68,290,410 | 28,076,555 | 48,853,394 |



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Feed Enhancement for Ethiopian Development – Phase II (FEED II)



The logical basis for FEED:

- Raising of livestock is a *major livelihood* activity and source of income in Ethiopia
- *Quantity* and *quality* of feed resources are major constraints to livestock production
- *Lessening these constraints* should lead to improved livestock producer income, standards of living and, ultimately, improved national economic development



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Intended Outcomes:

- Increase the productivity of livestock and poultry in Ethiopia by developing the animal feed sector
- Expand trade of agricultural products in the livestock and poultry sectors by introducing and expanding fattening, poultry and dairy enterprises



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- Strategies for addressing feed quantity and quality:
- Increase the size of the feed resource base through:
 - Increased adoption of improved forages
 - Improved pasture management
 - Development of new/alternative feeds
- Improve utilization of existing feed resources through:
 - Use of formulated feeds and supplements to better balance animal diets
 - Optimized feeding and grazing management systems



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FEED MAIN ACTIVITIES

1. Develop feed ingredient supply chain and service sector
2. Develop feed manufacturing enterprises
3. Develop sustainable forage production system
4. Introduce and expand feedlot (fattening), poultry and dairy enterprises
5. Promote improved on-farm feeding practices



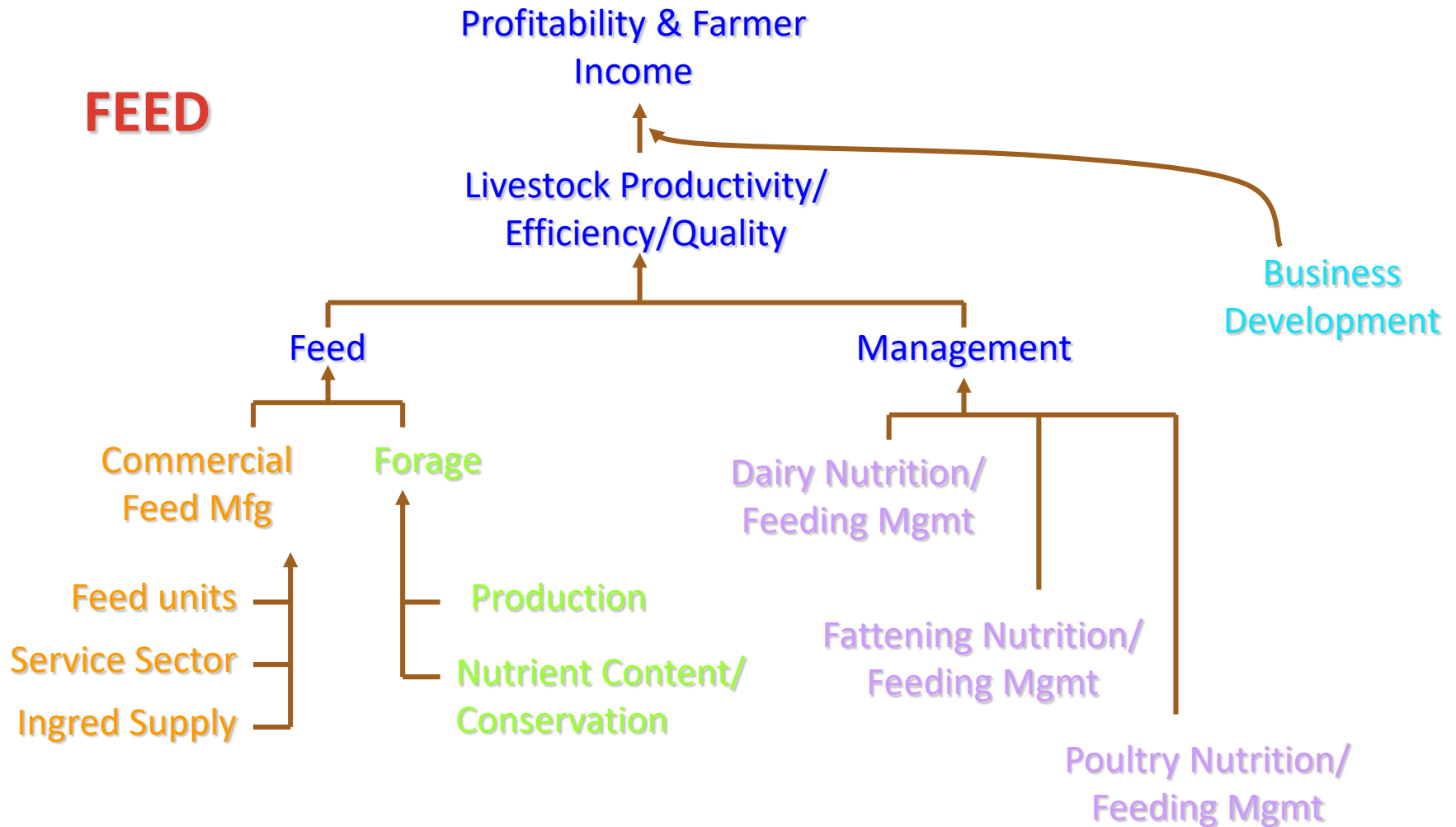
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| Regions | FEED II Cooperative Unions | FEED I Cooperative Unions |
|---------|--|--|
| Amhara | <ol style="list-style-type: none"> 1.Megenagna 2.Giyon 3.Mota 4.Gozemen 5.Damot 6.Admasi | <ol style="list-style-type: none"> 1.Merkeb 2.Wodera 3.Erikum |
| Oromia | <ol style="list-style-type: none"> 1.Biftu Selale 2.Galema 3.Aris Dairy 4.Diro Langano 5.Becho Woliso 6.Guto Gida 7.Meki Batu | <ol style="list-style-type: none"> 1.Selale 2.Wonji 3.Ambo |
| SNNPR | <ol style="list-style-type: none"> 1.Walta 2.Adimas 3.Melki 4.Michno Amba 5.Ayse Dawuro 6.Yirgachafe | <ol style="list-style-type: none"> 1.Sidama Elto 2.Licha Hadiya 3.Damot Wolayta |
| Tigray | <ol style="list-style-type: none"> 1.Humera 2.Tekeze 3.Felege 4.Geter Aduwa 5.Hawulit 6.D/Tenben | <ol style="list-style-type: none"> 1.Enderat 2.Wulwulo 3.Bokra |

Total membership: FEED I + II

1,271,129 (14% female)



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Expanding Opportunities Worldwide

CGIAR

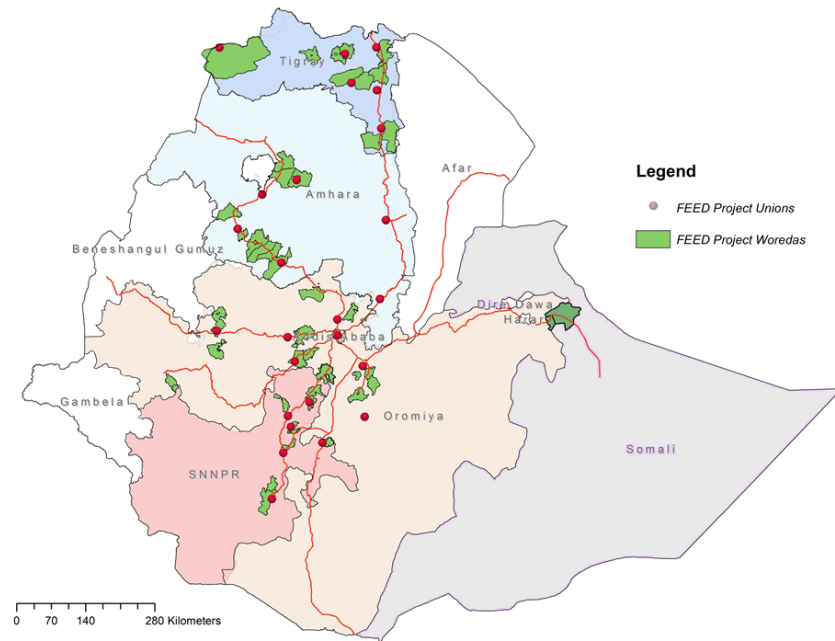
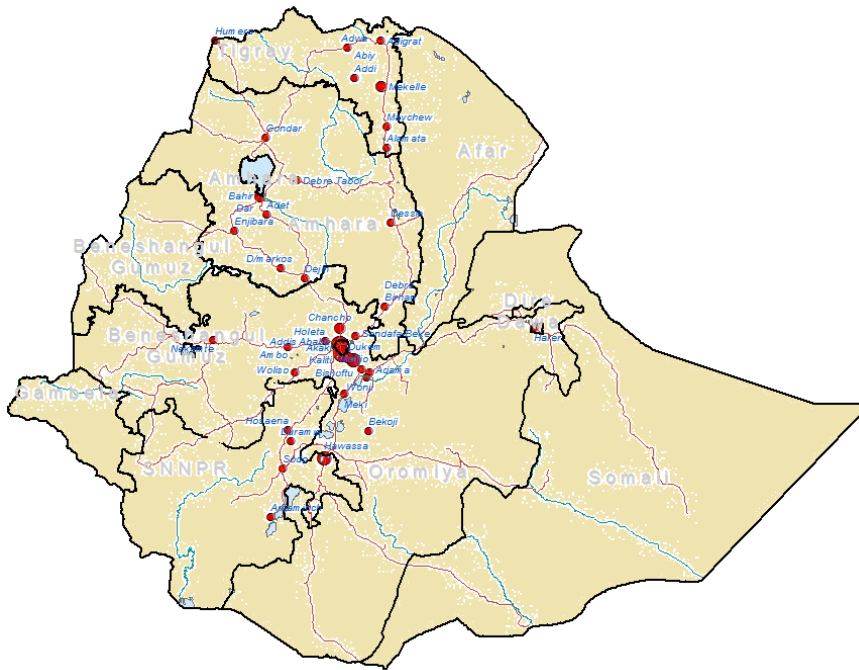
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Commercial Feed Manufacturer Locations



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Formulated Feed Production

| Firm Type | No of Firms | Single Shift Annual Capacity (MT) |
|-------------------------------------|-------------|-----------------------------------|
| FEED I and II Cooperative Unions | 25 | 48,000 (27%) |
| Domestic Private Sector Enterprises | 23 | 103,880 (59%) |
| Domestic/International partnership | 1 | 24,000 (14%) |
| Total | 49 | 175,880 |

Alema Koudijs Co.
Debre Zeit, Oromia



Ambericho Union
Durame, SNNP



Bokra Union
Maychew, Tigray



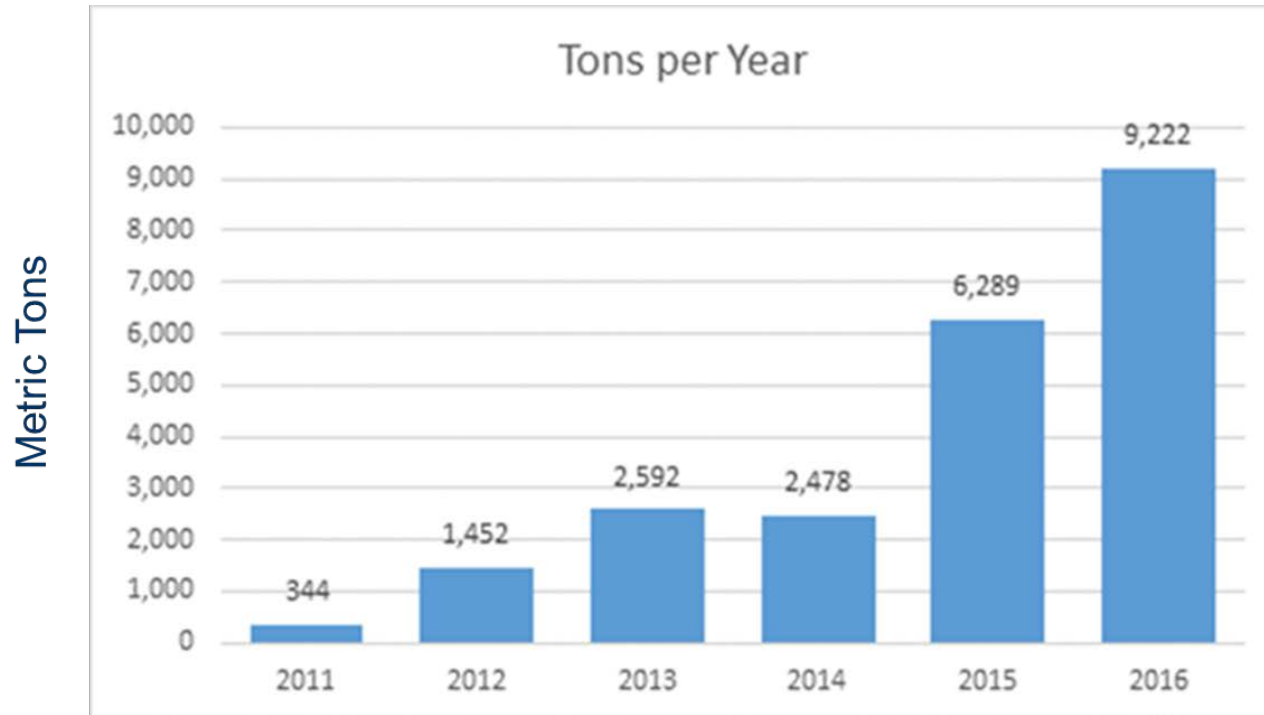
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22,377 MT
USD 5,645,106

Through Dec 16



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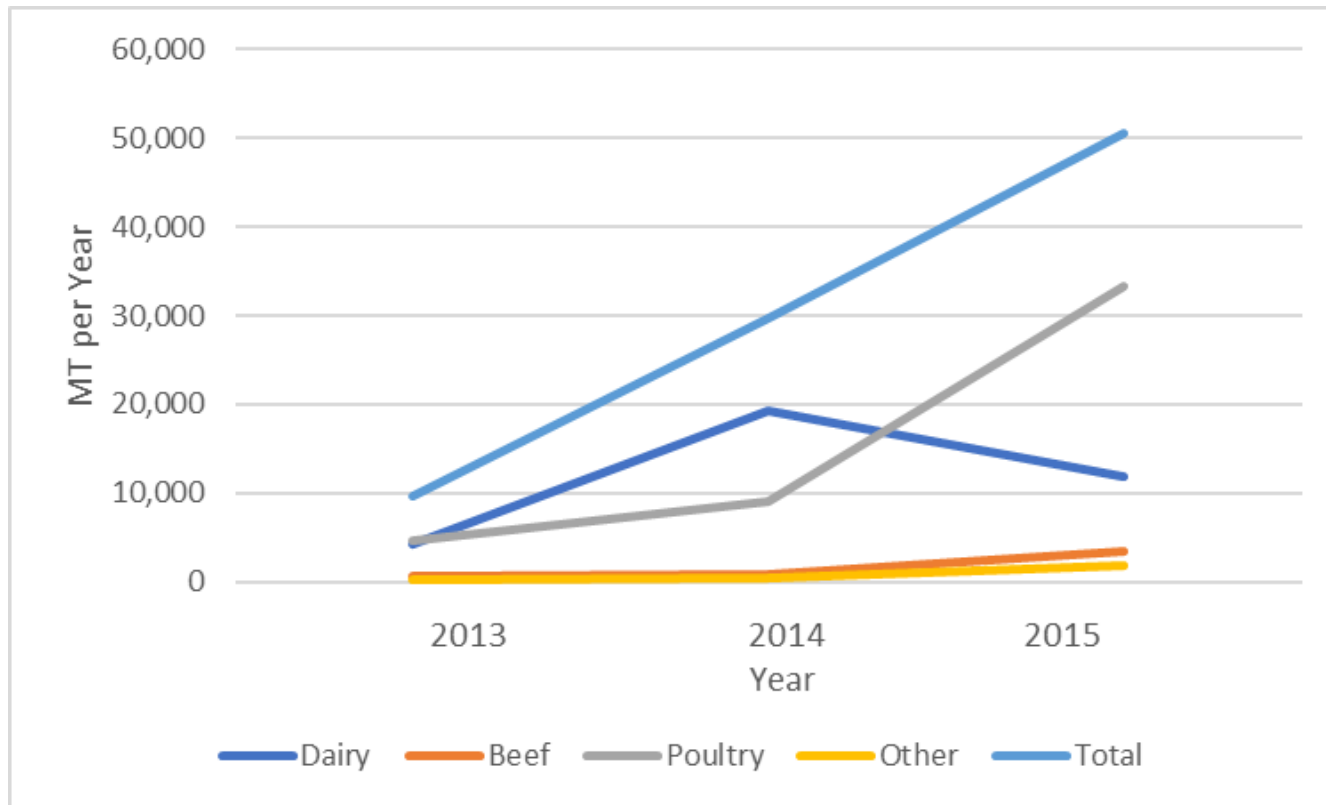




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Future Prospects



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Strengths of Union Based Feed Enterprises

- Transparency
- Reach to smallholder level
- Serve underserved communities
- Linkage to other unions
- Economies of scale



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Weaknesses of Union Based Feed Enterprises

- Weak management
- Staff turnover
- Weak connection with members
- Lack of commercial orientation
- Bureaucracy
- Political interference





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Three research themes?

Three development solutions?



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