



# **Formulation of Balanced feed for Working Equids under field conditions**

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# Equine population in India (19<sup>th</sup> Livestock census 2012)



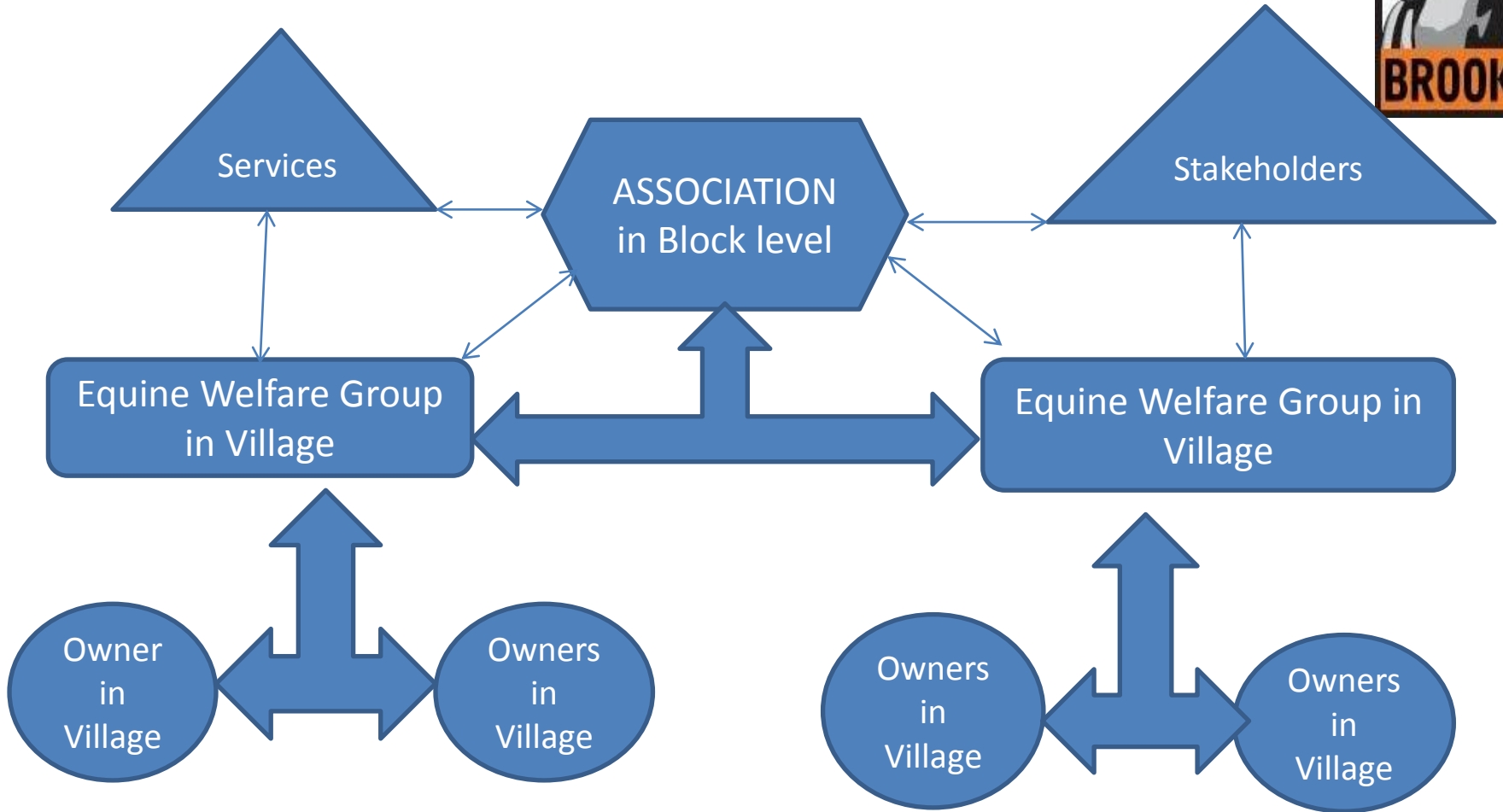
<b>HORSES and PONIES</b>	<b>0.62 million</b>
<b>MULES</b>	<b>0.19 million</b>
<b>DONKEYS</b>	<b>0.32 million</b>
<b>Total Equines</b>	<b>1.13 million</b>

# About Brooke Hospital for Animals(BHA), India



- Brooke Hospital for Animals(BHA), India is an affiliate of the Brooke, UK
- BHA works for reducing pain & suffering of working equids
- In India, BHA works in 11 states covering around 160000 working equids mainly in northern India
- Service provision & Community Engagements are two pivotal approaches practiced by BHA, India

# BHA's Community Engagement Model



# Gaps in feeding of working equids



- No balanced feed for equine is available in the local market
- Owners are poor and desire cheaper feed
- Rice bran, wheat bran, gram are traditional feeds used in North India
- Improper feeding can lead to higher susceptibility to diseases, potentially lowering working capacity and life span with many other adverse effects.



# Methods of Intervention



Development of Computer Based Feed Software



Analysis of gaps in feeding practice through series of community meetings



Development of cheap & best Formulation by community considering technical & economic factors



Pre-piloting body condition status recorded



Feed formulation by EWG & Feeding to 14 equids for 4 weeks



Post piloting body condition status recorded, analyzed in community meeting



## Feed Formula for a working equid with 250 Kg body weight working for 4-8 hours/day



Feed stuff	D M %	CP %	Digestible Energy M calories	Ca %	P %	Kg per 100Kg feed	Cost per Kg INR	Total cost INR
Maize	88	9.1	3.88	0.04	0.3	20	15	300
Barley	88	12	3.67	0.06	0.04	20	13	260
Wheat	88	14	3.83	0.05	0.43	26	14	364
Gram Husk	90	20	3.7	0.15	0.35	6.5	25	163
Wheat Bran	89	17	3.22	0.13	1.18	26	13	338
Mineral Mix						1.5		150
Labour, transportation cost & profit to association						-----		575
<b>Total</b>						<b>100</b>		<b>2000</b>



# Owners' Observation after piloting



- Palatability has increased
- The animals are more alert than before
- The animals are alert even after heavy work
- The animals' ability to cope with daily work has increased
- Balanced feed costs less than earlier (INR 20 per kg of feed against INR 40 per kg of gram)
- Animals' body condition has begun to improve

# The Association takes on the business

- The local Equine welfare association has taken up production of the balanced feed as business opportunity
- They organized exposure visit of owners from their 12 member villages
- The Owners could see the impact both in financial & nutritional aspects
- This resulted in adoption of formula by 100 owners
- The formula has been diffused to 5 nearby districts



# Insights



- To develop ownership on any intervention participation of owners in each step is helpful
- Computer Based Feed Software was the key input in implementing scheme.
- Local association became the pivotal platform for rapid diffusion of the formula
- As the formula was cheaper as well as nutritious, it could attract owners more rapidly



**THANKS**