

**BIHAR ANIMAL SCIENCES UNIVERSITY**

**BIHAR VETERINARY COLLEGE, PATNA**

**Department of Animal Nutrition**

**ANN-609**

**Non Conventional Feedstuffs & Toxic Constituents /  
Antimetabolites in Animal Feedstuff  
(Lecture-1)**

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# Unit - 1

## Point to be discuss.....

- **Present and future feed requirements & current availability for livestock & poultry.**
- **Use of non-traditional feeds – By-products of agricultural, industrial, food processing units and forest by-products.**
- **Evaluation by chemical and biological methods.**
- **Formulation of economical rations.**
- **Level of inclusion of various non conventional feeds in livestock ration.**

## Indian perspectives

- India -an agrarian country
- Agriculture and allied sector contribution is about 19% in the total GDP
- Out of which livestock sector contributes 24.72% i.e. about 1/4th of the agriculture GDP
- About 70 % of the people live in the village.
- Their livelihood dependent upon agriculture and livestock sector.

- Presently marginal (having less than 1 hectare of land) and small farmers (having less than 2 hectare ) are owner of about 45% and 20 % of the total livestock
- These farmers are not big guns in livestock farming; they are barely holding 1-5 dairy animals.
- Mostly buying fodder from fodder selling shops/units.

- Ranked first in total livestock population(20% of world livestock population)
- Ranked first in total milk production in the world.
- The productivity of animals is very low
- Major reason - qualitative and quantitative deficiency of forages is further
- compounded during lean and scarcity periods

# Scenario

- **At present the country is facing a net deficit of**
  - ✓ **35.6 percent green fodder**
  - ✓ **10.95 percent dry fodder**
  - ✓ **44.0 percent concentrate feeds.**

IGFRI.2010

Cont.....

## Fodder demand and supply scenario in the country (million Tonnes)

Year	Demand		Supply		Deficit		Deficit as %	
	Dry	Green	Dry	Green	Dry	Green	Dry	Green
2010	508.9	816.8	453.2	525.5	55.72	291.3	10.95	35.66
2020	530.5	851.3	467.6	590.4	62.85	260.9	<b>11.85</b>	<b>30.65</b>
2030	568.1	911.6	500.0	687.4	68.07	224.2	<b>11.98</b>	<b>24.59</b>
2040	594.9	954.8	524.4	761.7	70.57	193.0	<b>11.86</b>	<b>20.22</b>
2050	631.0	1012.7	547.7	826.0	83.27	186.6	<b>13.20</b>	<b>18.43</b>

## Project availability, requirement & deficit of CP and TDN (Million tonnes)

Year	Requirement		Availability		Deficit (%)	
	CP	TDN	CP	TDN	CP	TDN
<b>2000</b>	<b>44.49</b>	<b>321.29</b>	<b>30.81</b>	<b>242.42</b>	<b>30.75</b>	<b>24.55</b>
<b>2005</b>	<b>46.12</b>	<b>333.11</b>	<b>32.62</b>	<b>253.63</b>	<b>29.27</b>	<b>23.86</b>
<b>2010</b>	<b>60.04</b>	<b>347.8</b>	<b>42.95</b>	<b>271.3</b>	<b>28.47</b>	<b>21.99</b>
<b>2020</b>	<b>62.58</b>	<b>362.5</b>	<b>47.18</b>	<b>290.5</b>	<b>24.60</b>	<b>19.87</b>
<b>2030</b>	<b>67.01</b>	<b>388.2</b>	<b>53.09</b>	<b>320.2</b>	<b>20.78</b>	<b>17.52</b>
<b>2040</b>	<b>70.19</b>	<b>406.6</b>	<b>57.61</b>	<b>342.8</b>	<b>17.92</b>	<b>15.69</b>



Discussions.....

Questions, if any.....??

THANKS