Scope of Millets for Nutritional Security in Bundelkhand

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ABSTRACT

Millets are one of the oldest foods known to humans and possibly the first cereal grain to be used for domestic purposes. Millets are small-seeded grasses that are hardy and grow well in dry zones as rain-fed crops, under marginal conditions of soil fertility and moisture. Millets are also unique due to their short growing season. They can develop from planted seeds to mature, ready to harvest plants in as little as 65 days. When properly stored, whole millets will keep for two or more years.

KEYWORDS

Millets, Nutritional Security, Bundelkhand

Present Status

In pre-commercialization era there was a considerable area under major and minor millets and as per the available records their percent share was good in area and production. At present sorghum and pear millets are cultivated in Bundelkhand region while area under cultivation of smaller millets is negligible. However, among the smaller millets, small area under barnyard millets and kodo are reported in the districts of Bundelkhand Region. Share of millets in area and production of total cereals in kharif season in the region is 56% and 53% respectively. For more details, go through the table 2 given below.

Prospects

Traditionally, gram and wheat were the main rabi (post-monsoon) crops in most parts of Bundelkhand and Jowar and Bajra were the main kharif (monsoon) crops. A variety of coarse cereals like mandua(ragi), kodo, sawan (barnyard millet), kakun (Italian millet) and kutki (little millet) were also grown in the kharif season in some areas. Wheat was commonly grown in combination with gram. During the course of time farmers started to see the agriculture as a business and because of commercialization farmers switched over from traditional agriculture to modern agriculture.
<table>
<thead>
<tr>
<th>S. N.</th>
<th>District</th>
<th>Pearl Millet</th>
<th>Sorghum</th>
<th>Barnyard Millet</th>
<th>Kodo</th>
<th>Total Millets</th>
<th>Total Cereals</th>
<th>Percent Share of Millets of Total Cereals Production in Kharif Season</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A Prod&lt;sup&gt;a&lt;/sup&gt;</td>
<td>A Prod&lt;sup&gt;b&lt;/sup&gt;</td>
<td>A Prod&lt;sup&gt;c&lt;/sup&gt;</td>
<td>A Prod&lt;sup&gt;d&lt;/sup&gt;</td>
<td>A Prod&lt;sup&gt;e&lt;/sup&gt;</td>
<td>A Prod&lt;sup&gt;f&lt;/sup&gt;</td>
<td>A Prod&lt;sup&gt;g&lt;/sup&gt;</td>
</tr>
<tr>
<td>1.</td>
<td>Banda</td>
<td>3197</td>
<td>3181</td>
<td>9.95</td>
<td>24677</td>
<td>29400</td>
<td>11.91</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>Hamirpur</td>
<td>444</td>
<td>378</td>
<td>8.51</td>
<td>15808</td>
<td>12782</td>
<td>8.09</td>
<td>2</td>
</tr>
<tr>
<td>3.</td>
<td>Mahoba</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1814</td>
<td>992</td>
<td>5.47</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>Chitrakoot</td>
<td>15556</td>
<td>12323</td>
<td>7.92</td>
<td>11765</td>
<td>10186</td>
<td>8.66</td>
<td>26</td>
</tr>
<tr>
<td>5.</td>
<td>Jalaun</td>
<td>14529</td>
<td>12620</td>
<td>8.69</td>
<td>7053</td>
<td>6891</td>
<td>9.77</td>
<td>0</td>
</tr>
<tr>
<td>6.</td>
<td>Lalitpur</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>85</td>
<td>82</td>
<td>9.67</td>
<td>3</td>
</tr>
<tr>
<td>7.</td>
<td>Jhansi</td>
<td>6</td>
<td>5</td>
<td>8.33</td>
<td>775</td>
<td>751</td>
<td>9.67</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>33732</td>
<td>28507</td>
<td>-</td>
<td>61977</td>
<td>61084</td>
<td>-</td>
<td>36</td>
</tr>
</tbody>
</table>
More over change in the cropping pattern might also be due to availability of high yielding short duration and fertilizer responsive varieties, availability of market and high remunerative crops. But, due to change in the climate where temperature is increasing, ground water table going down and deficiencies of minerals in the diet, health hazards due to high amount chemicals in high fertilizer responsive crop varieties cared by using heavy doses of pesticide.

Bundelkhand regions falls under dryland agriculture and characterized by low and scanty rainfall, prolonged dry spell during crop season, narrow length of growing season, uneven distribution with respect to time and space, undulated topography and high temperature. More over other climatic and edaphic ailments suited well for the millets crops as the millets are known for low water requirement and thrives well under adverse climatic and edaphic conditions. Furthermore, millets are rich in minerals required for balance diet. Nutritionally millets are much superior over other cereal crops. A brief comparison is given in the table below. Constraints in cultivation of crops in the Bundelkhand Region have drawn the attention of Government. Now the Government has also stated at many platforms for inclusion of millets in the cropping pattern.

Moreover, in Bundelkhand Region there is acute shortage of fodder. Millets are important source of green fodder and dry fodder which play pivotal role to meet out the demand of fodder. It not only provides nutritionally enrich diet for human but it also supplies good quality and considerable amount of green and dry fodder.

Possible Action Plan

The following are key points to promote the millets in Bundelkhand:

- To Screen best performing varieties of millets
- To examine the area, production and productivity of millets in Bundelkhand Region.
- To analyze the nutritional quality and advantages of millets for human consumption.
- To identify the responsible factors limiting productivity of millets.

To give some effective suggestions and recommendations to enhance cultivation area and production.

References


http://millets.dacfw.nic.in/Importance_CoarseCereals.html

https://nutricereals.dac.gov.in/.

https://www.google.com/search?q=nutritional+content+in+millets&tbm=isch&ved=2ahUKEwiRm6jr_a32AhW1jtqFHZCMaAoQ2-