चियै - चिया

स्मारिका

२०६३

सम्पादन तथा प्रकाशन
राष्ट्रिय चिया तथा कफी विकास बोर्ड
केन्द्रीय कार्यालय, नयाँ बाडियाङ नं. १६६२, काठमाडौं, नेपाल
फोन: ००६६-३२-४४९५,४४९६,४४९०,४४९५,४४९६,४४९७,४४९८
फूलसाग: ४४९५,४४९७
इमेल: ntcdb@hons.com.np
: www.teacoffee.gov.np
शुभ-कामना

मा. महन्य ठाकुर

शुभ तथा सहारी मन्ने

नेपाल सरकार

विषय: ११८०१४४
अफिस: ५५५१०२
स्थान: १२३५७१० 
निजी संबंधाय 
मिसरियर, काजमाथी 
नेपाल

अन्नभा नाथिय भिखा तथा मन्नी मित्र गोईबाट प्रकट भक्ति हुन सनोको दिब्य दिव्या नामक स्वास्थ्यसिद्धि खिड़की तथा मन्नी मित्र सम्बन्धी दर्ज्योत्सव लागाउँदै। यस श्रेष्ठहरूले भक्तिसिद्धि बनाउन सबैले भक्तिसिद्धि बनाउन सबैले भक्तिसिद्धि 

उपलब्धी हुन सनोको दिब्य दिव्या नामक स्वास्थ्यसिद्धि खिड़की तथा मन्नी मित्र सम्बन्धी दर्ज्योत्सव लागाउँदै। यस श्रेष्ठहरूले भक्तिसिद्धि बनाउन सबैले भक्तिसिद्धि बनाउन सबैले भक्तिसिद्धि
शुभकामना

राष्ट्रिय चिवा तथा कफी विकास बोईले चिया तथा कफी विषयको स्मारिका प्रकाशित गर्न लागेकोमा मलाई बुशी लागेको छ। नेपालको चिचा तथा कफी उद्योगले अन्तराष्ट्रिय बजारमा समेट प्रतिस्पर्धा गर्न थालेको वित्तमान परिप्रेक्ष्यमा चिया र कफी खेती तर्क बढ्दो कृपक सहभागिताले राष्ट्रिय अर्थतथ्यमा नै उल्लेखनीय योगदान पुन सक्ने स्वस्त छ। विशेष व्यापार संगठनको सदस्य बनिसकेको हाथो देखि गुणस्तरीय उत्पादनमा विशेष ध्यान पुनरुत्थान पर्ने करा मनन गर्दै हालको अवस्थाबाट चिचा तथा कफी व्यवसायलाई आफ्नो विकासित गर्दै लागानकोलागि स्मारिकाले सहयोग पुनरुत्थान विश्वासका साथ सम्पूर्ण कृपक, उद्मी, व्यवसायी तथा यस क्षेत्रको समग्र विकासकोलागि शुभकामना व्यक्त गर्न चाहन्छ।

गणेश कुमार के.सी.
सचिव
दूसरे शब्द

पूर्व मंदिर देवी प्रशिक्षण महाकाली सम्मको दहनी श्रेष्ठगाम राज्यरेखा खिला तथा कपार स्वामीको विकास गर्न तक एक चौंसी लुकालो (Green gold) स्थान खिला तथा कपारी स्वामीको दर्शनी दुधा आर्जेन मैं देशो उपाधि बन सके सम्भवकालात आत्मसत्य गौ उद्धीतका विविध अध्यादेशसाइ टेक्स्ट अन्तर्दर्शको राष्ट्रिय खिला तथा कपारी विकास बोईने खिला तथा कपारीको राष्ट्रिय प्रदेश विकास तथा विकास सरकार जसलो सुचारू कारण परिवर्तनहरू परिवर्तनहरू बुढै मल्ली सम्भवितता समर्पणक सदाक प्राप्तीको विकास यात्रामा सैद्ध इतिहास र खिला तथा कपारी नीतिका स्पष्ट निर्देशकहरूलाई पालना गौ अन्तर्दर्शको साथी सम्भव कृष्ण, प्राथमिक उद्धीतम व्यापारी तथा खिलासकल्पकहरू सकारात्मक सहयोगको अयत्नकार साथ अपनी सहयोग सम्भवको आशा राष्ट्री सुभाषितमा राष्ट्र गौ बाहर।

खिला खिला स्वाक्षरकाको सफल प्रकाशनमा सहयोग पुग्याउन हुने सम्पूर्ण कम्बार द्वारा एक महामहाभाषालाई ध्वनिक खिला बाहर।

शुभ शंकर श्रेष्ठ
समिति कार्यालयी निदेशक
राष्ट्रिय खिला तथा कपारी विकास बोई
<table>
<thead>
<tr>
<th>नं.</th>
<th>लेखक/रचनार्थी</th>
<th>लेख/रचना</th>
<th>पृष्ठ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>श्रीमती निजामदीन जीली</td>
<td>राजेन्द्र कुमार दक्षिण</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>जनाबक चर्चामी राखन</td>
<td>बाबुल कुमार राखन</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>नेपालपुरा विजया छोयन सबैफल</td>
<td>डा. गोकील धनुशर धारा</td>
<td>6</td>
</tr>
<tr>
<td>4.</td>
<td>भन रामबाबू हर दाघन</td>
<td>भनुपुर रामबाबू हरिकोट</td>
<td>7</td>
</tr>
<tr>
<td>5.</td>
<td>विचार चिन्होको नितिकृत्ता</td>
<td>गायत्री रमानी</td>
<td>14</td>
</tr>
<tr>
<td>6.</td>
<td>विचार सम्बन्धी नाटकहरू</td>
<td>सुङ्ख्य आचार्य</td>
<td>17</td>
</tr>
<tr>
<td>7.</td>
<td>विचार तथा कथितमको स्थलमा</td>
<td>कलन कुमार राखन</td>
<td>19</td>
</tr>
<tr>
<td>8.</td>
<td>विश्लेषक कथा को नीतिफल</td>
<td>विराज पैरेल</td>
<td>22</td>
</tr>
<tr>
<td>9.</td>
<td>All About Tea</td>
<td>श्रीमती निजामदीन जीली</td>
<td>29</td>
</tr>
<tr>
<td>10.</td>
<td>Banding Nepal Tea</td>
<td>राजेन्द्र कुमार दक्षिण</td>
<td>32</td>
</tr>
<tr>
<td>11.</td>
<td>Tea at Ramchhap</td>
<td>ग्यान ब्द्र. चीत्र</td>
<td>34</td>
</tr>
<tr>
<td>12.</td>
<td>nepal Agriculture Research</td>
<td>श्रीमती निजामदीन जीली</td>
<td>37</td>
</tr>
<tr>
<td>13.</td>
<td>Coffee in Different</td>
<td>रिक्षेश धवकाल</td>
<td>42</td>
</tr>
<tr>
<td>14.</td>
<td>विषय न्यूयर्स मा</td>
<td>विराज पैरेल &amp; उ. केदार बुदेल्हराङ</td>
<td>51</td>
</tr>
<tr>
<td>15.</td>
<td>विषय nepal</td>
<td>श्रीमती निजामदीन जीली</td>
<td>54</td>
</tr>
<tr>
<td>16.</td>
<td>Feasibility of Organic</td>
<td>श्रीमती निजामदीन जीली</td>
<td>57</td>
</tr>
<tr>
<td>17.</td>
<td>Status and Potentiality</td>
<td>गोकील धनुशर</td>
<td>64</td>
</tr>
<tr>
<td>18.</td>
<td>श्रीमती निजामदीन जीली</td>
<td>दक्षिण कुमार दक्षिण</td>
<td>69</td>
</tr>
<tr>
<td>19.</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>71</td>
</tr>
<tr>
<td>20.</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>74</td>
</tr>
<tr>
<td>21.</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>76</td>
</tr>
<tr>
<td>22.</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>78</td>
</tr>
<tr>
<td>23.</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>80</td>
</tr>
<tr>
<td>24.</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>82</td>
</tr>
<tr>
<td>25.</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>84</td>
</tr>
<tr>
<td>26.</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>86</td>
</tr>
<tr>
<td>27.</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>88</td>
</tr>
<tr>
<td>28.</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>90</td>
</tr>
<tr>
<td>29.</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>92</td>
</tr>
<tr>
<td>30.</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>नारायण रामबाबू निजामदीन</td>
<td>94</td>
</tr>
</tbody>
</table>
मनीरी घानालाइ बिनो

मनीरी घानालाइ बिनो

राज्यमा सुरक्षा बङ्गोलकृष्क हून रहेको छ। आफ्नो विषय आफू पारिवारमा रहेको छ। नयाँ नबालिका बिनो नसक्छ। जस्तै त्यसैलाई यसको विपणन गर्न भाग्य यहूदी र जीवनसाथीका लागि अनौपचारिकता गर्न बाटौर नएको छ। त्यसैलाई निर्देशित भएको जस्तै प्राथमिक शेषीको लागि अनौपचारिकताः यसको बर्मालाई सबै दहनीकालापूर्वक जारी गर्नु लाग्छ।

श्रेणीबाट रूपान्तरित, उद्देश्य, आयादीप हेड्स हेडस देखि विकासको यथासाध्यको समय भाग्यमात्रात जारी भएको छ। उराल र नगरालाई निर्देशित भएको जस्तै त्यसैलाई सबै दहनीन्तरका समय भाग्यमात्रात जारी भएको छ। त्यसैलाई निर्देशित भएको जस्तै त्यसैलाई सबै दहनीन्तरका समय भाग्यमात्रात जारी भएको छ।
सधुमाय परिषाद : अधिकारीं का उपस्थिति हुई। तस्वीर का प्रदर्शन घट रहा। अंग्रेजी परिषाद का आयोजन हुआ।

बाज़ार प्रदर्शण : नैनिकीय विभाग और कला अध्यक्ष ने उपस्थित विषयों, ज्ञान, और कला का प्रदर्शन किया। अन्यथा, अंग्रेजी कार्यालय की प्रदर्शन करने के लिए उपस्थित होने वालों ने बाजार को बढ़ा दिया।

सीबीआई का प्रदर्शन का कारण अंग्रेजी कार्यालय की सहायता की। अंग्रेजी कार्यालय की प्रदर्शन करने के लिए उपस्थित होने वालों ने बाजार को बढ़ा दिया।

बाज़ार प्रदर्शण : नैनिकीय विभाग और कला अध्यक्ष ने उपस्थित विषयों, ज्ञान, और कला का प्रदर्शन किया। अन्यथा, अंग्रेजी कार्यालय की प्रदर्शन करने के लिए उपस्थित होने वालों ने बाजार को बढ़ा दिया।

सीबीआई का प्रदर्शन का कारण अंग्रेजी कार्यालय की सहायता की। अंग्रेजी कार्यालय की प्रदर्शन करने के लिए उपस्थित होने वालों ने बाजार को बढ़ा दिया।

बाज़ार प्रदर्शण : नैनिकीय विभाग और कला अध्यक्ष ने उपस्थित विषयों, ज्ञान, और कला का प्रदर्शन किया। अन्यथा, अंग्रेजी कार्यालय की प्रदर्शन करने के लिए उपस्थित होने वालों ने बाजार को बढ़ा दिया।

सीबीआई का प्रदर्शन का कारण अंग्रेजी कार्यालय की सहायता की। अंग्रेजी कार्यालय की प्रदर्शन करने के लिए उपस्थित होने वालों ने बाजार को बढ़ा दिया।

बाज़ार प्रदर्शण : नैनिकीय विभाग और कला अध्यक्ष ने उपस्थित विषयों, ज्ञान, और कला का प्रदर्शन किया। अन्यथा, अंग्रेजी कार्यालय की प्रदर्शन करने के लिए उपस्थित होने वालों ने बाजार को बढ़ा दिया।

सीबीआई का प्रदर्शन का कारण अंग्रेजी कार्यालय की सहायता की। अंग्रेजी कार्यालय की प्रदर्शन करने के लिए उपस्थित होने वालों ने बाजार को बढ़ा दिया।

बाज़ार प्रदर्शण : नैनिकीय विभाग और कला अध्यक्ष ने उपस्थित विषयों, ज्ञान, और कला का प्रदर्शन किया। अन्यथा, अंग्रेजी कार्यालय की प्रदर्शन करने के लिए उपस्थित होने वालों ने बाजार को बढ़ा दिया।

सीबीआई का प्रदर्शन का कारण अंग्रेजी कार्यालय की सहायता की। अंग्रेजी कार्यालय की प्रदर्शन करने के लिए उपस्थित होने वालों ने बाजार को बढ़ा दिया।
চিব্যা / কফী রোপে যাতায়ত জোরাও

এর মধ্যে উদাহরণ করলে অনেক অপশন থাকবে। এটাকে মূল কারণ হিসেবে দেখানো হয় যে পার্থক্য মেশিনের উপযুক্ত। কারণের মধ্যে স্বল্প অথবা বিস্তারিত উল্লেখ মূল পার্থক্য প্রাপ্ত হওয়া অনেক অপশন থাকবে। এর মধ্যে অন্যান্য অপশন থাকলে তিনি এটা অন্তর্ভুক্ত করবেন - কিছু স্বাভাবিক স্বতন্ত্র করতে হবে।

চিব্যা মানব প্রাণীর একটি বিষয় যা একটি জীবনরোপ হিসাবে উল্লেখ করা হয়। তিনি মানুষ এর জীবনের একটি অংশ হিসাবে উল্লেখ করেন।

চিব্যা হলো একটি জীবনোত্তর যা মানুষের জীবন এর অত্যন্ত অংশ। এটাকে মূল কারণ হিসেবে দেখানো হয় যে পার্থক্য মেশিনের উপযুক্ত। কারণের মধ্যে স্বল্প অথবা বিস্তারিত উল্লেখ মূল পার্থক্য প্রাপ্ত হওয়া অনেক অপশন থাকবে।

চিব্যা মানব প্রাণীর একটি বিষয় যা একটি জীবনরোপ হিসাবে উল্লেখ করা হয়। তিনি মানুষ এর জীবনের একটি অংশ হিসাবে উল্লেখ করেন।

(চিব্যা : নেপাল বিশ্ববিদ্যালয় বুদ্ধিতেকতা)
1. The fluctuation of the exchange rate can significantly impact currency transactions. It is therefore prudent to conduct thorough analysis before entering into any currency transactions.

2. The insurance industry has seen a marked increase in the demand for cyber insurance due to the rise in cyber-attacks. This trend is expected to continue in the coming years.

3. The government has implemented several policies to promote renewable energy, including wind power and solar energy. These efforts are aimed at reducing the country's carbon footprint and improving energy security.

4. The automotive industry is facing several challenges, including the shift towards electric vehicles and the need for improved automotive safety measures. These changes are expected to shape the industry in the coming years.

5. The technology sector is experiencing rapid growth, driven by advancements in artificial intelligence, machine learning, and robotics. This growth has led to increased investment in research and development, as well as the emergence of new market opportunities.
2. Lecture Course on manufacture of Tea Part I. A.K. Das, T.C. Boruah
3. Lecture Course on manufacture of Tea Part II, Scion Sarma, Goswami.
4. Tea Manufacture V. Rama Swamy.
The page contains text that is not legible or readable due to quality issues. It appears to be a page from a document that contains paragraphs of text, possibly in a language other than English. The content is not translatable or interpretable from the image provided.
ছিয়া সম্বন্ধী জানাকারী

ছিয়ার কেন্দ্রক: অসার অসকো

ছিয়ারা আগমন এবং অশান্তিটি কেন্দ্র করার জন্য ছিয়া সম্পর্কে গুপ্তচর আগমন এবং অশান্তিটি করার জন্য।

ছিয়ারা অঃপাতিত হলে, Peak Season মাত্র ৫৫,০০০ কৃষ্ণা প্রতি হাত হিসেবে প্রতীকাশ প্রশ্ন করার জন্য।

ছিয়ারা সম্পর্কে গুপ্তচর প্রশ্ন করার জন্য।

ছিয়ারা সম্পর্কে গুপ্তচর প্রশ্ন করার জন্য।

ছিয়ারা সম্পর্কে গুপ্তচর প্রশ্ন করার জন্য।

ছিয়ারা সম্পর্কে গুপ্তচর প্রশ্ন করার জন্য।

ছিয়ারা সম্পর্কে গুপ্তচর প্রশ্ন করার জন্য।
(Tea and Coffee Revolving Fund Collection and Mobilization Proposal)

Kashif Khan

1. Executive Summary

The proposal aims to increase the collection of revolving fund contributions by targeting tea and coffee growers. The current collection is estimated at Rs. 100 million per year, which is insufficient to meet the operational needs of the organization. The goal is to increase this figure to Rs. 150 million per year by 2020.

2. Target Market

The target market consists of tea and coffee growers across the country. The organization will work with local representatives to identify potential contributors and engage with them to encourage participation.

3. Marketing Strategy

The marketing strategy will include awareness campaigns, direct mail, and social media campaigns to reach out to potential contributors. The organization will also offer incentives for early contributors to encourage participation.

4. Implementation Plan

The implementation plan will involve setting up a dedicated team for the revolving fund collection. The team will work with local representatives to identify potential contributors and facilitate the collection process.

5. Financial Projections

The financial projections indicate a steady increase in contributions from Rs. 100 million in 2018 to Rs. 150 million in 2020. The proposed changes are expected to result in a significant improvement in the organization's financial position.

6. Conclusion

In conclusion, the proposal is aimed at increasing the revolving fund contributions to support the organization's operations. The targeted increase in contributions is achievable through effective marketing and implementation strategies.
> पहले कोई भी उल्लेख नहीं किया आपका चाकू बनाने के लिए यह खुशी है।
> 
> बच्चे भोजन में उपयोग किए जाने वाले कृत्रिम खाद्य पदार्थों के लिए यह खुशी है।
> 
> जनसंख्या के बढ़ते हुए शहरों में खाद्य पदार्थों के लिए यह खुशी है।
> 
> बच्चे कोई भी उल्लेख नहीं किया आपका चाकू बनाने के लिए यह खुशी है।
> 
> बच्चे भोजन में उपयोग किए जाने वाले कृत्रिम खाद्य पदार्थों के लिए यह खुशी है।
> 
> जनसंख्या के बढ़ते हुए शहरों में खाद्य पदार्थों के लिए यह खुशी है।
> 
> बच्चे कोई भी उल्लेख नहीं किया आपका चाकू बनाने के लिए यह खुशी है।
> 
> बच्चे भोजन में उपयोग किए जाने वाले कृत्रिम खाद्य पदार्थों के लिए यह खुशी है।
> 
> जनसंख्या के बढ़ते हुए शहरों में खाद्य पदार्थों के लिए यह खुशी है।
ಪಾಷಾಣಿಕ ಉಪಕ್ರಮದ ಪುನ: ಪಾಷಾಣಿಕ ಉಪಕ್ರಮದ ಪುನ: ಪಾಷಾಣಿಕ ಉಪಕ್ರಮದ ಪುನ: ಪಾಷಾಣಿಕ ಉಪಕ್ರಮದ ಪುನ: ಪಾಷಾಣಿಕ ಉಪಕ್ರಮದ ಪುನ: ಪಾಷಾಣಿಕ ಉಪಕ್ರಮದ ಪುನ: ಪಾಷಾಣಿಕ ಉಪಕ್ರಮದ ಪುನ: ಪಾಷಾಣಿಕ ಉಪಕ್ರಮದ ಪುನ: ಪಾಷಾಣಿಕ ಉಪಕ್ರಮದ ಪುನ: 33
8. The species' habitat can be found in freshwater bodies such as streams, rivers, and lakes. The population size is currently unknown but is believed to be stable. Due to its specific habitat requirements, the species is vulnerable to changes in its environment. Therefore, conservation efforts are necessary to protect its habitat.

9. The species' conservation status is critically endangered due to habitat loss and fragmentation. Conservation efforts include habitat restoration, species relocation, and public awareness campaigns. Research on the species' ecology and behavior is also crucial for effective conservation strategies.

10. The species' distribution is restricted to certain regions, and its conservation status varies across these regions. Conservation efforts should focus on these specific areas to ensure the survival of the species.

11. The species' population size is estimated to be less than 100 individuals, making it a highly endangered species. Conservation efforts should include habitat restoration, species relocation, and public education campaigns to raise awareness about the species and its conservation needs.

12. The species is threatened by habitat loss and fragmentation, as well as by introduced species and human activities. Conservation efforts should focus on protecting its habitat and reducing human interference in its natural environment.

13. The species is a keystone species in its ecosystem, playing a crucial role in maintaining the balance of the environment. Conservation efforts should aim to protect the species and its habitat to ensure the health of the ecosystem.

14. The species' conservation status is critically endangered due to habitat loss and fragmentation. Conservation efforts should focus on protecting its habitat and reducing human interference in its natural environment. Public awareness campaigns and research on the species' ecology and behavior are also crucial for effective conservation strategies.

15. The species is threatened by habitat loss and fragmentation, as well as by introduced species and human activities. Conservation efforts should focus on protecting its habitat and reducing human interference in its natural environment.

16. The species is a keystone species in its ecosystem, playing a crucial role in maintaining the balance of the environment. Conservation efforts should aim to protect the species and its habitat to ensure the health of the ecosystem.
(१) भवानीपुरी बैंकद्वारा औद्योगिक विकास के लिए आवश्यक पुरस्कार दिया गया।
(२) बंद्रा स्पीडोर के लिए अनुमोदन दिया गया।
(३) आयातक्षेत्र में अपने नवीनता की तस्वीर दिखाई दी।
(४) आत्मसमर्पण उपवास के लिए आयुक्त अध्यक्ष ने आवेदन किया।
ಸತ್ತೆ ಸೂಚಿ
ಜೈಲಿ, ರೈವು ೨೦೯೨, ಕಾಣಿ ಬಿಳಿವ  ಯೋಜನೆ ಕ್ರೊಸ್ ಎಸೆಬಿ ಕಾಣಿ ಮತಿ ಮಾತ್ರ, ಬಿಳಿವ ಸೋಸ್ಯುಟಾ ಮಾರ್ಕೆ. ರಾಜಿಯಲ್ಲಿ ಆಸ್ತವೂ ಕಾಣಿ ಸಿಂಬಲ ಬೊರೆ, ಕಾಡುತ್ತಿಂದ


http://louisvillehydroponics.com/orgarics.html
http://ftnt.net/windle/reference/july98.htm
http://wormcastings.com
www.biol.tsukuba.ac.jp/macer/ndia/bill97.html
www.ribuneiudia.com/20010305/agro.htm
www.urbanfischer.de/journals/pedo/content/issues/28195

ಚಿತ್ರ/ಕಾಣಿ ರೋಗ ಆಧ್ಯ ಬದಾವು.
Tea drinking habit has assumed to be an inseparable part of present day civilization. There are, indeed, very few left who may not prefer to go for a cup of tea. Millinons of people around the world barring US and some other countries in Europe, will invariably like this beverage more than any other drinks. Asians, in particular have their omnipresent preference for this stuff where nearly 2 cups of tea, on an average, is drunk. Countries like UK, Ireland, Germany, Russia and Holland, are amongst the list of nations importing substantial quantities of tea. This ever rising demand and preference for tea, can pointedly be attributed to its social values that it enhances. It is a well accepted fact that a visiting guest in our home is essentially greeted by offering freshly brewed hot tea. And, in comparison to other cold drinks or even coffee for that matter, tea continues to be undoubtedly the cheapest of all, despite the hike in prices, off and on. Besides, tea is free from any side effects. It possesses the characteristic of medicinal properties that has been proved to help the metabolism to human body. ’in the first place, tea is helpful in flushing the toxins off the kidney. The requirement of protein in human body is something in the region of 1300 grams out of which a cup of tea can provide at least 10 grams. On the other hand, the harmful effect of caffeine containment in tea is drastically low, something like 10 to 50 milligrams, in comparison to 130 in the case of coffee. In addition to this the presence of the flavin, i.e. vitamin 12 is reported to be in tea. It is also the common experience of drinkers that tea generates heat in the body which is actually to the extent of 40 calories. But the fact remains that tea is certainly a stimulating drink which in turn relieves the muscular and mental fatigue to enable someone to work with full vigour and clarity of mind. While examining all these divine properties inherent in tea, it can be said that what people have been drinking in their homes up until now was good and desirable because, by virtue of being a palatable and low cost beverage, it has its reach to the kitchen of both poor and rich, alike. In the light of this, we have to examine as to how fast the made tea reaches to the customer from the manufacturers, while maintaining the quality and reckoning the price. Made tea is really vulnerable to moisture absorption and once it happens then it will dispense with its basic characteristic of fine quality. And, in the meanwhile, tea has special feature to be able to pick up good or bad smell hanging in the atmosphere if it is exposed without being properly sealed pack for long duration. In both these cases, however, there are ample chances of loosing the quality. By quality, it means the bright liquid possessed of natural flavour and carried by live taste, pleasant to the palate. In any cup of tea if this fundamental characteristic is missing, while tasting, then for sure, the tea is question, has gone off and is not recommended for consumption. This situation may arise while storing the tea for a very long time which may entail the tea leaf to be contaminated by foreign elements, as one should know the rationals that tea simply should not be kept for long. It should be used before long. Therefore, as a result of this
vulnerability, tea is being recognized and included under the Essential Commodity Act in producing countries to avoid mishandling or treatment. The international tea committee under the auspices of FAO has also set up a parameter for tea quality under the article ISO 3720 requiring the member countries to adopt the same as the minimum standard. Meanwhile, moisture contain in tea for the importers is really a big headache. With the mutual understanding between the trading partners, it is being agreed upon, that at the time of dispatch the moisture should not be more than 4%. And importers would particularly want this condition be laid down while opening the letter of credit.

This is by far, the quality aspect in tea that we have discussed but how about the marketing part and the methodology through which it reaches in the hands of customers. There are basically three different ways by which tea is disposed of: (a) Ex-garden sale (b) Forward contract (c) Auction Sale. In the case of first option, the Manager in the garden may directly sale the bulk of the produce to the tea Merchant. In the second option: the producer may enter into forward contract with the bulk buyer, long before the production actually takes place. By doing so, the producer is fully assured of the timely cash flow, which he may be badly in need of for further investment in tea estate and in the meantime, the lifting of the product may also be carried out by the merchant at proper time. The third option: auction sale is the most scientific basis of clearing the tea off. Which is reliable, coordinated, and well organized. The need of Auction sale arises because of the nature in which the tea is made. It has infinite variety and types which may not necessarily be homogeneous from garden to garden. The other thing is that the buyers cannot visit each garden on every moment to get the teas purchased given the distance where they operate. Auction centre serves as a meeting place where up to 200 planters meet nearly 506 buyers to transact something like 500 tons of tea every week. And, in doing so, there are actually three parties, being involved in the fray: Buyers, Sellers, and Brokers, in India and elsewhere the management and regulation of Auction mechanism is administered with the help of an organization called the “Tea Traders Association” which is a representative body of the above three sides. It is the broker who will take the responsibility of selling the tea on behalf of the producer or seller and sends the proceeds after deducting his minimum percentage of brokerage to the tea planter.

In respect of pricing the product, even if the broker may maintain the floor price at the start of the auction, but it is at the bidding competition later, that the price is ultimately being formed and fixed. In other words, the highest bidder is liable to lift the tea. So, one may see that there is nobody to influence upon the formation of price, instead, it is automatically being done at the culminating point of demand and supply.

Tea Auction centre based in London is as old as 167 years and continued to be the largest in terms of volume of transaction for considerable period of time, but it is now being replaced by Colombo Auction in Sri Lanka. The Calcutta Auction based in "Nilhat House" is certainly the prominent one in terms of selling good quality tea at the highest recorded price.
While keeping in mind the progressive method of selling the tea, Nepal also devised the mechanism of Auction in the year BS 2042 and succeeded knocking down 12000 kgs of tea to the local traders for the first time. But unlike the other centers, Nepal Auction was conducted independently by the then public sector of HMG'S undertaking, 'Nepal Tea Development Corporation'. The sale through this auction went on for a few years but, due to low response and unattractive bidding from the buyers side prompted, this method of sale to topple. Apart from this compulsion, the response from the government officials was not encouraging either. They were carried away by such a notion that auction floor is meant to sell all discarded or rotten manurials and tea, they thought, was deliberately made stale by storing for long by the management and made some plea to sell it by way of this process. Although, a great attempt was made by Nepal Tea Corporation to incorporate private sector gardens to use this venue for the sale of their product but they declined to participate. However, Nepal did pave the way for future sale of tea in a scientific basis through this process.

By all means, it appears as though, the time has come to think seriously about adoption of Auction again in the present context. In view of the fact that, now, the total scenario in respect to the production and management has changed with many more tea estates now being in operation, the sale of tea even 50% to start with, should be channelled through Auction. If this is done, most likely, Nepal will be enlisted in the international tea world as a country possessing solid base of infrastructure for tea marketing. Furthermore, the price for tea in the domestic market will also be streamlined which will be helpful for the consumers of tea to have a first hand knowledge about the prevailing index of price for every purchase.

In this respect, The Tea Board of Nepal, being the apex body empowered to enact the laws for the promotion, management and for the welfare of tea, in general, is recommended that a resolution be passed with a proposal to establish a solid base of tea auction in Nepal. Before doing so an organization comprised of buyers, sellers and brokers be formed by the initiative of the Board which then will pave the way for auction. Given the rising consumption and the complex nature of tea market vis-à-vis the pricing pattern of tea in the country, the urgency of Tea Auction Mechanism to regulate the market, cannot be ruled out.

---

BETWEEN AND BETWEEN HEALTHY TEA IN BETWEEN
The good news is that Nepal produces world’s finest orthodox tea. The bad news is that most of the Nepal’s organic tea is believed to sell for 30 percent less value than it would have otherwise if the industry had direct market linkages to Europe. Until recently, the country knew little and cared even less about the difference in value.

Nepal Tea fetches much lower price for the quality it actually offers as it makes way to the international markets – mainly Europe – through international auction facility in Calcutta, India as the Darjeeling Tea.

<table>
<thead>
<tr>
<th>FY</th>
<th>Potential Value</th>
<th>Actual Value*</th>
<th>Difference Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999/00</td>
<td>36,746</td>
<td>25,722</td>
<td>11,024</td>
</tr>
<tr>
<td>2000/01</td>
<td>32,977</td>
<td>23,084</td>
<td>9,893</td>
</tr>
<tr>
<td>2001/02</td>
<td>39,696</td>
<td>27,787</td>
<td>11,909</td>
</tr>
<tr>
<td>2002/03</td>
<td>77,011</td>
<td>53,938</td>
<td>23,103</td>
</tr>
<tr>
<td>2003/04</td>
<td>149,746</td>
<td>104,827</td>
<td>44,924</td>
</tr>
<tr>
<td>2004/05</td>
<td>626,816</td>
<td>438,771</td>
<td>188,045</td>
</tr>
</tbody>
</table>

*Source: Nepal Tea and Coffee Development Board

A cursory look at the table above would suggest that tea export, increasing by the year, is fetching increased revenues into the country. If we take a deeper look at the figures, however, with increase in exports value inherently comes an increase in the loss value. Every year, Nepal is losing a hefty sum of money, mainly because the country has not been able to brand and market its tea – simply the world’s best.

Nepal has a relatively young tea growing history and produces less than one per cent of the world’s orthodox tea. The Nepal Tea is not as well-known as India’s Darjeeling and Assam tea, which have a history of more than 150 years. Similarly, Sri Lanka tea has enormous contribution to the country’s economy and has distinctive features and repute as among the best.

It is evident that the relatively newer bushes in and around the eastern hills of Nepal produce better quality orthodox tea as compared to that of Darjeeling. The deteriorating quality of Darjeeling tea and increasing demand for orthodox tea worldwide offers Nepal tremendous prospects to expand and trade the produce outside of Nepal.

Additionally, researches done in the recent past have suggested that the Nepalese orthodox tea, grown in the Himalayan environment with pure air and water, could be branded as the apex/top quality tea in the world. This would call for a branding strategy, but Nepal did not have one. Of late, however, there are some tangible efforts under way to develop an effective and sustained marketing of Nepal Tea. To that end, for organized marketing, GTZ/Private Sector Promotion Project has been working alongside HOTPA (Himalayan Orthodox Tea Producers’ Association) and HIMCOOP (Himalayan Tea Marketing Cooperative) to promote orthodox tea exports in the
world market, with major focus in Europe. The campaign consists of branding exercise, product development and facilitating microfinance for small tea farmers.

With the realization that marketing of brand name - Nepal Tea - is the international market is critical, GTZ has led the facilitation of the development of Nepal Tea logo to be showcased as the image identity with the catchphrase: Quality from the Himalayas. To that effect, in September 2003, Nepal's participation in the Hamburg Tea and Coffee World Cup was successfully facilitated by GTZ in cooperation with HOTPA, HIMCOOP, Winrock International and Ministry of Commerce and Industry of His Majesty's Government of Nepal. The event - where the Nepal Tea logo was introduced - is considered one of the most prestigious fairs for tea and coffee industries involving world's premium trading firms.

Furthermore GTZ has recently facilitated the merchandising of 500 boxes of the Reinhold Messner limited edition tea in association with HIMCOOP where Jun Chiyabarti Company managed the logistics. As part of the efforts to position Nepal Tea as a premium speciality tea brand, this brand energiser exercise was performed.

In this connection, to strengthen the brand promise and assure unique excellence of Nepal Tea, GTZ/PSP have introduced and assisted in the formulation of a set of Code of Conduct amongst the manufacturers of orthodox tea based on norms obtained from the International Federation of Organic Agriculture Movements, the Codex Alimentarius, the International Social and Environmental Accreditation and Labelling Alliance and Social Accountability International thereby.

The vision of CoC is derived from the concept of maintaining the minimum standard for production, processing and marketing with due consideration to ecological, social and economical dimension at different stages of the value chain. In essence, the idea of introducing CoC for orthodox tea industry in Nepal is to integrate the farmers, processors and exporters to come into a single fold for quality output. Having said that, the basic for the success of the Nepal Tea trademark that is to be used for export promotion is to help produce superior quality tea production that is derived from environment-friendly technique of production with biodiversity preservation and local human resource recruitment.

The actual draft of the CoC for production, processing and marketing of Nepal Tea is an outcome of a joint consensus among different stakeholders of the orthodox tea sector in the country with a strong conviction that quality and reliability are the key factors for the success of the produce. The Tea Development Alliance, comprising Agriculture Enterprise Center of the Federation of Nepalese Chambers of Commerce and Industry, HOTPA, National Tea & Coffee Development Board, Winrock International and GTZ, has been making persistent efforts towards implementation of the CoC. When the tea industry at home begins to implement CoC, Nepal will be the first country in the world to self-policing. This will not only go a long way in Nepal's well-coordinated efforts to brand Nepal Tea, but also encourage tea growers around the world to practice self-policing. This will give Nepal an edge over the rest, including the neighbours. What's more, those who sign the CoC contract - that aims to push obligatory yardsticks on the members of HIMCOOP (which include all but two factories of orthodox tea) regulating production, processing and employment - may also have the privilege to use the "Nepal Tea" logo. The logo is envisioned to reflect quality and purity of Nepalese orthodox tea in the global market.
Tea at Ramechhap

Nepal is a country with the highest cross slope, ranging from about 60 m. above mean sea level to 8848 m. above mean sea level within a stretch of about 100 km. Nepal’s new fragile mountains and hills have to be preserved. Greener movement, though late, has to be started. Innovative and revaluationary cultural practice has to be adopted to suit our environment. If need of the hour is not realized we’ll have gone backward instead of forward. Nepal’s organic farming will have to be rewarded in the international arena.

The importance of tea as a health drink has not yet been widely known. The consumption will go up when pharmaceutical value is publicly realized. The medical value is much more in organic tea as it is totally free from harmful agro chemicals. Medical experts should advise people to drink as much tea as possible.

Darjeeling is traditionally thought to be synonymous to quality tea. Nepal is climatically topographically capable of taking this label as Nepal tea is thought better than Darjeeling tea. Prospects are huge. Nepal should introduce itself as a quality tea producer. It is realized that global tea industry should go for cost effectiveness to survive in growing global competition. There is always room for quality tea in world market.

So far the concept of tea is restricted to five districts only, viz. Jhapa, Ilam, Parchhar, Terahum and Dhankuta however the area of coverage is limited. There is a dwindling new concept of ‘Mid eastern Nepal tea area’ which comprises Nuwakot, Sindhupalchok, Dolakha, Ramechhap, Solukhumbu, Okhaldhunga and Sankhuwasabha. Let’s hope the dwindling concept will eventually come into light and take definite shape.

Even though Ramechhap District is small, 138438 sq. km it has all shorten of climate found in the world. Some of the low land drained by tamakoshi, Sunkoshi, Likhu has tropical like climate in summer. Globally the area falls in subtropical climate. Temperature and arctic like climate can also be found in some upper north part of the district. The elevation ranges from 369 m. to 6958 m. Geomorphological details of Ramechhap district is given below.

<table>
<thead>
<tr>
<th>Type of land form</th>
<th>Area (Sq Km)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active and recent alluvial plains-</td>
<td>1.88</td>
<td>0.12</td>
</tr>
<tr>
<td>Alluvial plains fans</td>
<td>2.15</td>
<td>0.14</td>
</tr>
<tr>
<td>Alluvial plains and fans (Depositional)</td>
<td>20.96</td>
<td>1.34</td>
</tr>
<tr>
<td>Alluvial, Colluvial and Morainal</td>
<td>0.75</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Between and between healthy tea in between
Ancient Lake and river terraces (Tills, erosional) 1.02 6.07
Moderately to Steeply sloping Mountainous terrain 369.31 22.97
Post glacialized mountainous terrain 237.0 15.15
Steeply to Very Steeply sloping mountainous terrain 639.22 40.87
Data not available 321.98 15.30
33.33 100%

Such a steep land has to be covered by Tea and coffee where possible. People who have visited KERALA, one of the states of South India are impressed with its greenery. Greenery is preserved in such a state where having above mentioned geomorphological condition greenery is neglected. Tea culture at Ramchhap district has to be focussed to bring economical and ecological betterment. Though farmers are not ready to adopt revolutionary culture practice, they should be encouraged. Incentives should be given to shift them from revolutionary culture change to revolutionary culture change.

Two tea co-operatives covering six VDCs are in operation at Ramchhap district. One, 'Himachuli tea producers Co-operative Limited' which came into existence some eight years ago, is working ahead at a snail's pace. Barma, Gutheli, Kukurkathal and Chuchurte VDCs are the areas of coverage. Another 'Mithi tea and coffee plantation Co-operative limited' was established last year. It covers two VDCs viz. Bijuhat and Gadh. Though the area is very potential, the progress has not taken any speed. Existing and proposed tea areas are shown in the map.

There are other areas which should be proposed for the tea producing areas. Viz. (1) Ramchhap Bazaar area focusing Ramcehab, Sakajar, Okhlini and Salumpi VDCs (2) Rasthali area focusing those, Hanala and Butala VDCs (3) Gapleshwar area focusing neat, Gapleshwar and Bhuj VDCs (4) Daragau area focusing Duragau, Shupu and NAMDI (5) Doramba area focusing Ganwar, Daduwa and Doramba. These are the places where precipitation and humidity are relatively high and potentiality has been noticed. Other hidden places will also come into light and replicate. In world context, Nepal is not yet thought as tea producing country. The country should endeavor to explore potentiality. Hydro power, tea, coffee and herbs are the things which will make Nepal prosperous.

Finally it is emphasised that leaders should not act as pleaders and Manager should not act as damages for the prosperity of the nation.
NEPAL AGRICULTURE RESEARCH COUNCIL
IN TEA RESEARCH AS COMMERCIAL CROP

Shambhu Lai Shrestha

Introduction

Commercial Crop Division (CCD) is one of the central coordinating and leading divisions under Nepal Agricultural Research Council (NARC). CCD is primarily concerned with programme planning, execution, monitoring and evaluation of research activities on suitable varieties selection, soil fertility, pathogens causing diseases, insects, pests, and weeds of commercial crops (Tea, coffee, sugarcane, jute, ginger, cardamom, cotton etc) to develop appropriate techniques/technologies. Now-a-days tea is cultivated in 15012 hectares and their production is more than 11 million kilogram that provide 04 percent to AGDP, the national economy. Orthodox and CTC two types of tea are being produced in Nepal traditionally based. Mainly orthodox tea is being produced to export and CTC to consume within nation. Nepal has potential and is famous for orthodox production world wise because of its quality. Demand of orthodox tea is globally increasing due to aromatic quality.

Team work as multidisciplinary effort and approach on research and development of commercial crops is in urgent need to increase overall production and organic products to meet and compete WTO aspect and foreign open market. However, national need is to increase productivity and organic products of commercial crops.

RESEARCH ACTIVITIES

1. Survey and surveillance of major pests (diseases insects, weeds and (ornithus) to know occurrence, distribution and epidemics of tea

2. Test and develop appropriate plant protection measures for controlling major pests (diseases and insects)

3. Bakaino, banamara and mixture of neem, jternati, bannamara and signo has been found effective in the suppression of blister blight disease and thrips insect of tea

4. Evaluation and selection of high yielding and quality tea cultivars suitable for hill and terai of eastern region.

5. Screen the disease tolerant/resistant and high yielding cultivars of tea.


RESEARCH HIGHLIGHTS

BETWEEN AND BETWEEN HEALTHY TEA INBETWEEN
Disease:

Ilam, Dhankuta, Terathum, Panchthar, Nuwakot Jhapa, Kabhreplanchowk, Sindhupalchowk, and Ranechhap districts were surveyed and monitored. Blistar blight (Exobasidium vexans), red rust (Cephalura parasiticus), grey blight (Pestalotia theae), black rot (Coricium spp.) and root splitting (Armilaria mellea), Stem and branch canker (Macrophoma the ioclase), collared and branch canker (Phomopsis theae), red rot disease (Porta tassulatecristata) was identified on the basis of observation, visual symptoms and lab. tea in tea growing area. Identifying of seasons of diseases occurrence and distribution of tea are continuing in tea growing field. Bakaino, banmara and mixture of neem, titepali, balaino, banmara and sisu were found effective in blisters blight disease suppression.

Weed:

Several types of pernicious weeds are prevalent in tea growing area, which are responsible for production and quality reduction. Some samples of major weeds have been collected and identified. Identified destructive weeds of tea are under research working in tea of hill and terai.

Insect-pest

Many destructive and polyphagous insects are prevalent in tea field, which are also responsible to reduce production, quality and crop damage. Major insect pests are aphid, white grub, helopeltis, mites, loopers, stem borer, cut worm, leaf roller, bug, red ant and so on. Bakaino, banmara and mixture of neem, titepali, balaino and sisu were found effective in thrips insects suppression.

Plant parasites: (Loranthus): Some plant parasite has been found in tea field Their name is dendrophiue sp.

Clone (Variety):

There were two types of tea clones in Nepal i.e. orthodox and CTC. The clone of TV and TS all series of tea has been planted in tea garden. They are Indian and Chinese. There are more than 40 types of tea clones in Nepal. The clones, which are standard clone, yield clone and quality clone are under research /studying in Ilam, Dhankuta, Terathum, Panchthar, Nuwakot and Jhapa district.

---

DRINKING TEA EVERY DAY CAN KEEP THE DOCTOR AT BAY 3 C.
Tea Development Alliance E-news

Tea Alliance Activities

• Follow-up meeting on CoC was held in February 3 at NTCDB to discuss on the issues of tea CoC.
• A meeting was held at NTCDB on February 13 at 11:00 am with SNV team to brief about tea alliance. The main goal of the meeting was to formalise cooperation between tea alliance and SNV East and between the tea alliance and SNV/REAP (with support of implementation partner, IEDI).
• This meeting was followed by Tea Global Development Alliance meeting which started at 1:00 pm to discuss on the activities by partners.
• Tea alliance meeting was held on March 15 at NTCDB to discuss on TOR for SNV/Farmer CoC implementation with two factories and its selection, present CoC status and the World Tea Expo 2006. Meeting to prepare TOR for SNV Factory/Farmer CoC implementation was held at HIMCOOP on March 22. The final endorsement of TOR is expected to be done by the alliance. (Details below)
• Soil analysis of farmer’s field for tea cultivation initiates from February 27 till March 16.
• Interaction meeting was held at Agricultural Trade Promotion and Market Development Directorate to discuss on “Nepal tea, cardamom and flower production and market: possibility and challenges” for two days from February 28 till March 1.
• Tea sub-sector service provider meeting was held at TCGDA-SMIG/WI on March 3. The discussion was held on skill development program such as quality tasting of training through skill test in tea sub-sector.
• Codes of Conduct (CoC) meeting was held on March 15 at TCGDA-SMIG/WI which decided that HOTPA would take a lead role in implementing CoC and steering committee meeting would be held as soon as Mr. Deepak Baskota, Vice-Chairman of HOTPA becomes available to further discuss on procedures of implementation of CoC.
• WI Agriculture Program staff meeting with Mr. David Norman, Vice President of Enterprise and Agriculture Group, WI, U.S.A was held on March 24 followed by reception dinner at Greenwich Hotel, Bakhundole, Lalitpur where partners and important guests were invited. Mr. Norman returned to U.S.A on March 26.
• World Tea Expo 2006 show started from March 27-29, 2006 at Las Vegas Hilton Hotel, Las Vegas, U.S.A. Five members from Himalayan Tea Producers Cooperative (HIMCOOP), namely, Ms. Charlotte Gerden, CMO; Mr. Bachan Gywali, Proprietor, Jun Chiyabari and Member; Mr. Krishna Prasad Prasad, Proprietor, Proprietor, 11am Tea Producers (P) Ltd. and Member; Mr. Sushil Prasad Rijal, Proprietor, Kuwapani Tea Plantations, Vice-Chairman; and Mr. Chandra Bhushan Subba, Team Leader, TCGDA-SMIG/WI and Advisor participated in this event. (Details in Page 2)

A CUP FOR YOU CAN KEEP KISSING PRETTY
Tea Alliance Meeting

A meeting was held at National Tea and Coffee Development Board (NTCDB) on February 13 at 11:00 am with SNV team to brief about tea alliance. The main goal of the meeting was to formalise cooperation between tea alliance and SNV East and between the tea alliance and SNV/REAP (with support of implementation partner, IEDI).

Tea alliance will develop a MoU for starting up activities between SNV/East and two tea factories and their respective farmer groups in 11 areas. The alliance will consider the cost contribution and involvement of the factories for the proposed program for the purpose of selection. Bidding and meeting of factorises will also place to select two factories (and get their financial commitment etc.). Terms of references will be formulated before activities are implemented.

This meeting was followed by Tea Development Alliance meeting at the same venue on the same date at 1:00 pm to discuss on the current activities of tea alliance partners.

Similarly, follow up alliance meeting with SNV teams was held on March 15 at NTCDB to discuss on FDR for SNV Farmer CoC implementation with two factories and its selection, present CoC status and the World Tea Expo 2006. The team of Mr. Amro Ting (Tamang/SNV and Mr. Maheshwar Ghimire/Consultant were decided to prepare Terms of Reference for SNV-Farmer CoC implementation.

Meeting to prepare FDR for SNV-Farmer CoC implementation was held at HIMCOOP on March 22. The final endorsement of FDR is expected to be done by the alliance. FDR for SNV-Farmer CoC implementation is also expected to be initiated from April 2006 till October 2006.

The World Tea Expo

The World Tea Expo is the premier market place and tea trade show for the North American tea industry. After water, tea is the most consumed beverage in the world, and with the tea market exploding in America, tea represents an exciting profit center.

The World Tea Expo is a tea trade show and tea conference organized annually and has been one of the fastest growing trade shows in the U.S., a testament to the growth of the North American tea business. Whether your business is a tea room, coffee shop, spa, restaurant, gourmet retailer, distributor, or bed & breakfast, the World Tea Expo is a must-attend event. The event-packed World Tea Expo hosts hundreds of the finest wholesale tea, tea related product vendors, and a huge selection of information-filled tea seminars to grow your business. The World Tea Expo delivers more for your tea business.

World Tea Expo organized this prestigious show which started from March 27-29, 2006 at Las Vegas Hilton Hotel, Las Vegas, USA. Altogether, 190 exhibitors displayed their products and it was expected that around 3,000 attendees would attend the event.

Nepal also represented Nepal Thru at The World Tea Expo with the name “Nepal Himalayan Tea” which was displayed at Booth #427. Five members from Himalayan Tea Producers Cooperative (HIMCOOP), namely, Ms. Charlotte Gerhardner, CMO; Mr. Bishal Gyawali, Proprietor, Jun Chiyabari; Mr. Krishna Prasad Pradhan, Proprietor, 11 Tea Producers (P) Ltd.; Mr. Sushil Prasad Rijal, Proprietor, Kupwari Tea Plantations; and Mr. Chandra Bhusn Solbha, Team Leader, TCDDA-SMIGWI participated in this event. During the expo, Nepal tea was promoted in the international market along with Nepal Tea Logo.

The details about Nepal Himalayan tea, Booth # 427 is given below.

\[\text{BETWEEN AND BETWEEN HEALTHY TEA IN BETWEEN}\]

\[\text{80}\]
Contact Name
Charlotte Giriner
Chief Marketing Officer
P.O.Box 23496
Kathmandu, 44600,
Nepal
Phone: 977-1-210-606
Fax: 977-1-521-942
Email: himcoop@wlink.com.np
UPL: www.nepalhimlayanstea.com

Welcome to the taste of pure Nepal Himalayan Teas!

Profile:
Nepal Himalayan Teas marketed by Himalayan Tea Producers Cooperative (HIMCOOP, NEPAL) has special unique teas grown in the Himalayas. Teas manufactured with respect to nature, people and with commitment to quality.

Brands:

<table>
<thead>
<tr>
<th>Category</th>
<th>Tea</th>
<th>Tea - Loose Leaf</th>
<th>Tea - Oolong</th>
<th>Tea - Organic</th>
<th>Tea - White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grown Estate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grown Estate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

We wish All Our Alliance Partners A Warm and Healthy Happy New Year 2063

Tea Global Development Alliance (TGDA) Secretariat hereby through this E-news request all the partners to the alliance to provide their valuable suggestion and input with respect to improving the quality of the E-news to the extent best possible.

For further information please contact:
Tea Global Development Alliance - Smallholder Mobilization through Improved Governance, Wimico International (TGDA-SMGI)
Bathunam, Lalitpur, Nepal
E-mail: tgda_smgi.wi@yahoo.com
Tel: 977-1-528465/5282743

DRINKING TEA EVERY DAY CAN KEEP THE DOCTOR AT BAY
Coffee in Different Periodic Plans

Rishikesh Dhakal

In Nepal planned development process was initiated by 1956. The first five year periodic plan of His Majesty’s Government (BMG) of Nepal was launched during 1956-1961. Nepal is in the stage of launching the tenth periodic plan at now. Coffee, a plantation/industrial crop, is incorporated under the Ministry of Agriculture and Cooperaive (MoAC). Therefore, search on coffee sub-sector, in periodic plans, is done in agriculture sector for the preparation of this article. The information of the plans, concerning to coffee, are copied from the different periodic plans of the National Planning Commission (NPC), as far as possible. Since significant physical target and priorities were not addressed till the fifth plan period (1975-1980) the article jumped on to the sixth periodic plan.

The Sixth Periodic Plan (1980-1985) has discussed about coffee under the heading of agriculture sector. Principal program of special crop explained coffee as “at present coffee plantation is limited to Gulmi, Argakhanchi and some parts of Palpa. By the end of the plan coffee plantation will be spread over 42 hectares to fulfill the plan objective of reducing its import by degrees.”

Seventh Periodic Plan (1985-90) describes about coffee production programme as: - coffee has a second place next to tea in the beverage family. With the increase in the consumption of coffee in the urban area import quantity has been increasing. Expansion of area under coffee has been found feasible from the studies conducted in the previous plan. Emphasis will be given to produce marketable coffee by processing coffee seeds, increase demand of coffee by developing coffee cultivation in the feasible areas by paying good prices and special emphasis will be given to increase earning and employment opportunities to farmers.

In the seventh plan existing production of 19 metric tons of coffee seed will be increased to 46 metric tons. Base year area of coffee farm of 61 hectares will be increased to 131 hectares. The following steps will be taken to produce coffee to fulfill the proposed production target in the seventh plan.

a. Production resources and means will be mobilized in implementing the coffee plantation as special program.

b. At this moment, coffee farming is concentrated in Gulmi so far but will be extended to Palpa and Argakhanchi during the plan period. Greater emphasis will be given in the expansion of coffee farming on a commercial scale.

c. Production inputs like chemical fertilizer seeds, agricultural loan and different technical services will be provided through the nearest service center under the supervision of district production team.

d. Coffee plants produced by the private nurseries under proper technical supervision will be marketed.

e. Studies as approved by research coordination committee will be carried out for increasing production and productivity.

f. Private sector will be made more active for coffee processing and organizing market by installing roaster and grinder for coffee seeds thus produced. Necessary technical services will be provided by the food processing programme.

P. Additional arrangements will be made to develop necessary manpower commensurate with the intensity of the coffee programme. Basic training of workers and farmers, who will be associated with the programme, will be conducted according to approved training programme through the training centers. Planting techniques, increase production and productivity by use of fertilizers and water and ploughing, on the spot seasonal training will be conducted at agriculture farm at Palpa and through service centers under

A CUP FOR YOU CAN KEEP KISSING PRETTY

B 3
Annual production target of the coffee production during the Seventh Plan is presented in the Table.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Gumli</th>
<th>Palpa</th>
<th>Arghakhanchi</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Area</td>
<td>Production</td>
<td>Area</td>
<td>Production</td>
</tr>
<tr>
<td>Situation at</td>
<td>1984-85</td>
<td>57</td>
<td>19</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>1985-86</td>
<td>67</td>
<td>20</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>1986-87</td>
<td>73</td>
<td>32</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>1987-88</td>
<td>87</td>
<td>30</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>1988-89</td>
<td>97</td>
<td>35</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>1989-90</td>
<td>107</td>
<td>40</td>
<td>22</td>
</tr>
<tr>
<td>In the Plan Period</td>
<td>1990-91</td>
<td>50</td>
<td>21</td>
<td>20</td>
</tr>
<tr>
<td>Projected</td>
<td>1992</td>
<td>87.70</td>
<td>110.50</td>
<td>100.00</td>
</tr>
<tr>
<td>Procurement</td>
<td>1993</td>
<td>100.00</td>
<td>120.00</td>
<td>110.00</td>
</tr>
</tbody>
</table>

Eighth Periodic Plan (1992-1997), under agriculture forest and land reform sector, coffee is mentioned in production target and programme of industrial and cash crop. It is written as: although coffee production is still confined to a few districts in the kingdom, coffee plantation is gaining popularity. Increases in the production of a cash crop like coffee will not only substitute for export but also will enhance income and employment opportunities for farmers. Therefore, a coffee plantation programme will be launched to promote it in other potential areas of the kingdom. Coffee production programmes will be implemented on a priority basis in a few districts in the western Region. By expanding the coffee area by additional 170 hectares during the plan period, the total area is estimated to increase to 350 hectares by 1996/97, of this, production is expected to begin in 51 hectares giving a yield of 133 m. tons. Yield levels will increase from the present 0.2m. tons per ha. to 0.3 m. tons. Intensive coffee programmes will be implemented in the districts of plapa, Gumli and Arghakhanchi. Where technical services will be provide from coffee development centre while other production inputs such as fertilizers, agriculture credit etc. will be supplied by concerned institutional agencies. For improved seeds/saplings, selected local farmers will be encouraged to produce and arrange their supply. By launching a publicity campaign about coffee farming in potential districts, some interested pioneer farmers will be selected and taken on a study tour of coffee producing districts to familiarize them with coffee farming and its economic significance. Thus, emphasis will be laid on the extension of coffee farming to other districts, too. Experimental studies will be conducted in collaboration with agricultural research council on improving the coffee variety and relevant technology. Special emphasis will be given to promote coffee plantation by providing degraded forest areas on long-term lease with the cooperation of forestry management programme to farmers groups, cooperatives or entrepreneurs willing to introduce coffee farming.

Mutual co-ordination will be established between coffee processing industries and producers for the development of market for coffee beans. A training programme on coffee processing will be introduced in collaboration with the central food research laboratory and the agricultural training centre.

Palpa, Arghakhanchi and Gumli district are put on priority under the intensive citrus fruits extension programme with coffee.
Ninth Periodic Plan (1997-2002) took coffee under high value crop and explained coffee as - It is possible to develop coffee farming in different hilly areas of western and central regions due to geographical diversity. If coffee production is developed in effective manner, its production and productivity increase and input substitution can be achieved. At the same time, it can also contribute to improve farmers' income and employment opportunities. During the Eighth Plan period, the target of coffee coverage was 350 hectares and the production target was 155 quintals. But the end of the Plan, due to inefficient data collection, the proposed target of coverage expansion and production fell short. It is estimated that the production of coffee grain was 37 quintals and coverage 300 hectares. Coffee development programme could not achieve the expected progress due to inadequate research and marketing facilities. With the past experience of short fall in progress resulting from production focus without analysis of the taste of internal and external consumer, a number of factors need to be taken into consideration such as marketing system, internal processing capacity and its needs, technical capacity and liberal economic system. Coffee development programme will be carried out as follows in the Ninth Plan.

In order to increase internal consumption of processed coffee using local technology, appropriate programmes will be identified and launched to develop the taste of consumers. Technical service will be made available for initial processing of coffee at farmer's level and for handling processing equipment.

- Nepal Agriculture Research Council (NARC) will coordinate for technology development of producing quality coffee grain, making the production competitive, increasing productivity and decreasing production cost. On the basis of coffee grain market and technology, emphasis will be given to conduct commercial farming to giving priority to the pocket areas of feasible districts. Arrangements will be made to provide necessary support services in the form of package to such pocket continuously.

- With the emphasis on manpower development concerned with coffee, arrangements will be made for study and training. Emphasis will be given for infrastructure development in commercial coffee production areas.

Priority: Priority will be given to provide support services in order to promote commercial coffee production along with the production for home consumption on the basis of demand. This will be carried out by coordinating with coffee processing industries and exporters.

Physical target: Coffee cultivation will be increased to 444 ha by cultivating additional 144 ha of land during the plan period. According to this, it has been projected that about 110 quintals of coffee will be produced from the total productive area of 252 ha by the end of the Plan.

**Projection of Coffee Production in the Ninth Plan**

<table>
<thead>
<tr>
<th>S.N.</th>
<th>FY</th>
<th>Total Area (ha)</th>
<th>Additional Area (ha)</th>
<th>Total Production Area (ha)</th>
<th>Total Production of dried berry (qtn)</th>
<th>Total Production of Parchment Base (qtn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1997/98</td>
<td>324</td>
<td>24</td>
<td>348</td>
<td>117</td>
<td>55</td>
</tr>
<tr>
<td>2</td>
<td>1998/99</td>
<td>354</td>
<td>30</td>
<td>384</td>
<td>111</td>
<td>70</td>
</tr>
<tr>
<td>3</td>
<td>1999/00</td>
<td>484</td>
<td>30</td>
<td>514</td>
<td>190</td>
<td>256</td>
</tr>
<tr>
<td>4</td>
<td>2000/01</td>
<td>414</td>
<td>30</td>
<td>444</td>
<td>217</td>
<td>250</td>
</tr>
<tr>
<td>5</td>
<td>2001/02</td>
<td>444</td>
<td>30</td>
<td>474</td>
<td>242</td>
<td>332</td>
</tr>
</tbody>
</table>

**DRINKING COFFEE EVERY DAY CAN KEEP THE DOCTOR AT BAY**
Ten Josef Periodic Plan (2002-2007) targeted the coffee production and annual economic growth as follows:

<table>
<thead>
<tr>
<th>Agricultural Projects</th>
<th>Weightage</th>
<th>Level of Development</th>
<th>Export Growth Rate</th>
<th>Normal Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Level of the Final Target 50%</td>
<td>Growth Rate</td>
</tr>
<tr>
<td>Coffee</td>
<td>2000</td>
<td>1.1</td>
<td>0.6</td>
<td>0.2</td>
</tr>
</tbody>
</table>

The strategies set on the plan that is also suitable for coffee sub-sector is presented as follows:

For the technology dissemination pocket package program will be launched on the locations specific priority crops/commodities identified by Agricultural Perspective Plan. Such pocket areas will be expanded and finally developed as special agricultural production zones. Considering the possibilities of export promotions and the import substitutions crops/commodities produced in such developed pockets, necessary infrastructure development programs will be implemented in an integrated way.

For the commercialization of agriculture and the market development tenet plan took strategies as below:

- Agriculture extension services will not be limited to the production but it will focus on commercialization based on comparative advantage, agricultural business promotion and effective market information delivery.
- The integrated agricultural information technology development and dissemination will be made to integrate agricultural production and products marketing from the production area to the market site. The greater participation of the cooperatives, the private sector and women group will be encouraged in market management and operation.
- In the context of virtual entry into World Trade Organization, related research and laboratory networks will be strengthened to maintain competitive quality/standards for the promotion of the export of agriculture related products and processes food items.
- Emphasis will be given to the development of commercial pocket by providing support for production, collection, quality enhancements, grading, packaging, processing etc., on the special crops having export prospects like tea, coffee, cardamom, ginger, garlic, chilly.
- The non-governmental organizations will be encouraged to encompass the existing community-based organizations/groups rather than forming new ones while implementing the programs.

For the involvement of private sector, cooperatives, partnership and contractual arrangement (th) plan emphasized that the agriculture and livestock development programme will be implemented in partnership or contract with different cooperatives, farmers or farmers' groups or their committees.

For this a system of open competition will be adopted.
Legal and institutional reforms and their implementation arrangements are set forth as: provisions will be made for the production and distribution of quality fruit seedlings through the enactment and implementation of the Nursery Act.

Or the chapter Role of Government, Non-Government And Private Sector tenth plan can be linked with coffee as: contract and partnership programmes will be launched to enhance involvement of private and non-government sector by implementing programmes that are run under government sector. The private sector will be further encouraged in the production and distribution of production inputs like seeds, seedlings, chicks, goats, vet services, soil test services and chemical fertilizers. The government institutions will have their role more as facilitators, regulators and monitors rather than the implementers of the programme.

Conclusion

- The information collection system seems very poorer. Empirical information, as a basis of Planning, seems confusing in the set targets by periodic plans.
- It needs to coordinate with stakeholders on data updating on area and amount of coffee production. A specific (separate) committee to verify and update the data may help to strengthen the information system.
- Coffee is emerging as a major organically grown exportable commodity to earn green dollars in Nepal. Though it is discussed separately till the ninth periodic plans, it is hidden in the tenth plan.

Reference:
Second, tenth periodic plan: National Planning Commission of Nepal
RESEARCH NEEDS ON COFFEE ENTERPRISE DEVELOPMENT IN NEPAL

Tek Prasad Gotsame
Dr. Kedar Buishahi

Abstract

Coffee is one of the emerging and high value cash generating commodities for hill farmers of Nepal. Though Nepal is endowed with suitable environment to produce high quality coffee “specialty coffee” and “highland coffee” thereby contribute in poverty reduction, productivity is very low (300kg/ha) as compared with other countries. There is wide scope to increase productivity of coffee beans by about 300% provided appropriate technology and development efforts. Low productivity and poor quality is mainly due to inadequate supply of plant nutrients, water stress condition, pest problems particularly white stem borer, poor yielding varieties and lack of appropriate post harvest technology particularly processing. There is wide variation in coffee plant genetic materials within farmer’s field and location. Identification, evaluation and selection of these indigenous materials along with exotic varietal selection, improvement in existing manuring practices, soil moisture management, organic pest management and processing technique to increase coffee cup quality are the major research areas to develop coffee farming, as leading enterprise in Nepal. It has been realized that there should be an alliance of multi stake holders and multidisciplinary divisions in coffee research leading by NARC to develop permanent system of coffee research in Nepal.

Introduction

Coffee is one of the emerging and high value cash generating commodities for hill farmers of Nepal (Khanal, 2003). This sector has been generating large amount of foreign currency. It is an important occupation in the rural, marginal and poor class of hill farmers. Moreover, it is an important source for soil conservation, biodiversity maintenance and environment protection. Nepal is endowed with provable climatic and soil conditions to produce good quality coffee “specialty coffee” and “highland coffee” above 800 to 1400 meter (Dhakal, 2005). Commercial Coffee cultivation in Nepal has been done in 21 districts. It is estimated that the coffee plantation covers more than 1000 ha of land with a total production of 250 mt of dry cherry (Dhakal, 2005). This provides employment for more than 7000 farm households of the hills of Nepal. However, the production and productivity per plant is very low as compared to other countries. The productivity of dry cherry in Vietnam is 1477 kg/ha, Costa Rica is 1582 kg/ha, India is 800 kg/ha while it is only 300 kg/ha for Nepal (Dhakal, 2005). It is estimated that with appropriate development efforts, the level of production could be raised by as much as 288% (Khatiwada, 1999). Farmers are growing coffee without any knowledge to maintain healthy plants that produce adequate yields to make their investment viable. Nepalese farmers are practicing organic coffee production. They do not use chemicals as fertilizers or plant protection measures as far as possible. They produce “organic” coffee by default because farmers are either poor to buy adequate chemical fertilizer and pesticide or these inputs are unavailable at the right time of application. In addition, there is surplus labor available at the cheap rate. Nepalese farmers don’t have any defined and
research based production technologies. In this paper, attempts have been made to delineate research areas to increase quality coffee export thereby poverty reduction in Nepalese hill farmers.

Major Research Areas in Coffee enterprise development

The technology used in the production and processing of coffee in Nepal continues to remain primitive, leading to low yield and poor quality of produce. Coffee is predominately planted in hilly areas as additional crops without considering the primary crop. Moreover, farmers grow coffee plants on steep hills where other crops don’t perform well under low input and poor management conditions. Most of them are poorly guided for the plantation of coffee in its technological basis. Following are the major researchable areas to increase coffee productivity thereby increase export market.

1. Varietal development

Use of poor yielding coffee genotypes is one of the identified constraints of poor productivity. It has been noted that there is existence of large numbers of local genotypes which have wide variation in yield and bean quality within farm and location. Collection, evaluation, selection and conservation of existing genotypes is one of the important areas of research for improving productivity and quality of coffee in small and marginal farmers. Local genotype selection should be done for pest and disease resistant, high yielding, wide adaptability and good cup quality. Varietal development in Nepal is virtually non-existent, except for some varieties imported from Brazil by LARC (Kauswal, 1999) and INGOs (Dhakal, 2005). Recently it is general practice for INGOs to introduce new varieties in farmers’ field. These varieties have to recommended only after evaluation through permanent system of research.

2. Integrated soil nutrient management

Poor and inadequate soil nutrition is one of the important factors of low production. Coffee plantation utilizes unproductive fallow lands and shabby areas (Nepali et al., 2004). Coffee is one of the heaviest feeder commodities to produce economic yield. Nepalese farmers practice coffee plantation in a marginal lands. Farmers have to make decisions as to how to allocate their very precious manure and compost. Does it go to vegetable and cereal fields or to the coffee orchard? On the other hand, how much manure and fertilizers for which part of the plant should be applied is also not defined by research based data. Following major research areas have to pay attention to manage fertility status in coffee orchard.

- Packages of production of organic coffee
  (Organic sources of fertilizers, Microbial fertilizers, Vermicompost etc.)
- Legume inter-cropping

3. Integrated pest and disease management

Conventional coffee plantations are generally confronted with a multiplicity of pests and diseases. In practice, there is lack of defined technologies for pest and disease management. Among the various insects, white stem borer (Hylobius quadripes) has been found as the most important one causing extensive economic damage to coffee (Khadge et al., 2004). Farmers of Palpa district generally do not have any indigenous knowledge on controlling coffee pest (Jaiswal, 2003). Similarly
semenodes are also the another important pest. Farmers lack knowledge of combating these pests. Organic methods of controlling these pests may be useful, but their knowledge at present is limited to combating of specific pest only. Furthermore, organic pest management technology has to be given priority for research to increase organic coffee production and export.

4. **Proper shade and canopy management**

Productivity has been dropped to uneconomical levels per plant because farmers lack in knowledge on essential, necessity and paramount importance of pruning coffee plants. It is related to the production cycle and if not done properly will eventually reduce healthy plants to 10-15% of production capacity.

Shade, a major requirement in the dry season is also observed in Pidka district as either too thin or too thick resulting in poor productivity and poor health. Intercropping under-mandarin orchard is a general practice in Lamjung, Gorkha, Tanahun, Syangja and Pidka districts which work as shading to coffee plants (Nepal et al. 2004). Economic analysis, profitability of shade as companion crop, and effect on coffee disease and pest have to be studied.

5. **Integrated soil moisture management**

Farmers grow coffee plants as rainfed crop. Inadequate soil moisture leads to under utilization of applied fertilizers thereby poor yield and quality. Following are the research areas to increase or conserve soil moisture in coffee orchard.

- Deep irrigation technology
- Rain water harvesting technology
- Waste water utilization technology
- Mulching technology

6. **Postharvest technology**

Tightly processed Nepalese coffee has right characteristics for marketing as 'speciality coffee' in the international markets. Coffee from Nepal has all the components to develop into a quality product with a unique taste profile (Katuwal, 1999). Recent sample tests have shown that with careful processing, coffee from Nepal can easily be an export commodity fetching high price in international market (AEC, 2004). Some important areas on the processing are to be designed with processing plants of appropriate size. Product development, including unroasting, roasting methods, better packaging and marketing promotion backed by research are some of other key areas that should be overlooked.

**Conclusion and recommendation**

Absence of research and technology transfer in coffee enterprise is the bottleneck to develop this sector as a viable and most contributing to national GDP. Whose responsibility is it to develop coffee technology in Nepal? Obviously, it is of NARC, but there is neither adequate manpower nor adequate budget with NARC for conducting research. There should be development of permanent system of technology generation in alliance with multisectors and multidisciplinary divisions. Provision of support should be made in research and technology development through defined government policies.
References


Nepal Coffee Promotion Strategy

Krishna Prasad Pahak

Agriculture marketing is a macro economic phenomenon and the product we offer needs to be competitive to the international market by making quality, price and volume compatible with the international standards. Very few marketers and consumers get prepared to switch to the new product. To get consumers switched to the particular product and make the consumers assured that their money is not spared and mood is magnified by making the product perfectly compatible to their quest. It needs heavy investment to promote the product in the international market. Infrastructural facility for an industry is like a home for a family. The strategy should be to attract the players in the international market to formulate the integrated strategy to promote the particular product in the international market.

The concept of sub sector cites the vision to create the value chain form producers to consumers competitive by enabling farmers and synchronizing the thrust of all value chain actors to the mission to make the particular value chain competitive.

Nepal has some strength as following

- Geographically favorable situation to grow coffee as highland and organic specialty.
- Farmers of mid hills are convinced and organized from villages to national level.
- Organic coffee farming technology is extended among farmers since last 8 years.
- Basic processing and marketing infrastructure is built.
- Nepali coffee has got the penetration in the international market.

Strengths not inculcated in all concerned components appropriately will create imbalances and turn into the weaknesses. Strengths enhanced will provide the ground to sustain the industry.

Nepal has some weaknesses as following

- The environment of the coffee growing areas is still not conducive for business orientation.
- Only few farmers have got coffee as the major part of their household economy and farmers' organization is not operating on its internal revenue but relying on the externally funded development support.
- Technological package of coffee farming is not baked up with total quality, productivity and marketing concept.
- Coffee is adopted in too small scale and remoteness of the coffee growing areas is not lucrative for commercial service input delivery, financial, infrastructural, processing and marketing facilities.

Persistent weaknesses will create the obstacles and if properly understood and managed, provide the guidelines for strategic positioning of the product in the market.
Nepal has some opportunities as following:

- The present status of the evolution of the farmers' organization favorable to develop the commercially viable service packages to assist farmers for coffee farming and develop itself as the institutional infrastructure for commercialization of coffee in Nepal.
- Promotion of the enterprises in the coffee sub-sector will accelerate the commercialization of agriculture in the rural economies.
- Promotion of the commodity organization equipped with the package of total quality concept to address the quality thrust of consumers at the Specialty Coffee Association of Nepal and promoting it in international market will promote Nepal as the brand in the international coffee market.
- Coffee sub-sector will provide the infrastructural and conceptual facility to commercialize and marketing of other agricultural commodities as well.

These opportunities will provide the vision to promote Nepal as the brand in the international market and promote coffee sub-sector as the national export base that benefits the marginal people most and simultaneously contributes the enhanced green crown of the hills of the Himalayan ranges of mountains.

Nepal has some threats as following:

- Government commitment may not be consistent to sustain the coffee industry in the long run.
- Commodity association may fail to promote the total quality concept and the quality and price and volume still remain incompatible with the international market.
- Commodity associations may fail to develop its internal revenue base to sustain in the long run.
- Commodity associations and development supporting agencies may indulge in the matters other than the commercialization of the coffee in the rural economies.
- Lack of coordination of the different stake holders may result in the not competitive value chain of coffee sub-sector.

These threats if materializes, will result in the drainage of resources invested in the past, massive community frustration and high renunciation cost in the future. If understood properly, provide precautions to avoid the obstacles for the success of the sub-sector.

Coffee is a highly competitive commodity with a wide range of price and quality. Strong collaboration among value chain actors will make the commodity competitive.

Commodity association and the government provide the environment and leader in a particular value chain should be encouraged to inculcation of managerial and technical back up to all chain members.
Practical strategy to promote coffee in Nepal

1. Groups of the coffee farmers in the coffee growing village should be developed as the cooperatives preferably one cooperative in one village.
2. Prepare the farmers' family resource map of farmers consisting of land, labor reserve, and potential investment commitment.
3. Prepare the cooperative business plan (CBP) to address the need of farmers' families to develop the farmers' sustainable agricultural family farms (PSAFF).
4. Include the facilities of technical service delivery, input production and delivery, processing and storage facility in the cooperative business plan.
5. Include the financial facility to PSAFF with the collaboration of banks and cooperatives.
6. Include in the cooperative business plan the collective guarantee of cooperatives and providing fund for the activities consisting of the CBP, monitoring and providing management services to PSAFF.
7. Include in the CBP the provision of developing the partnership of the processing and marketing company and the cooperatives for longer period like 5/6 years.
8. Develop internal control system (ICS) for organic coffee farming, national monitoring mechanism, organizational capacity building package for groups and cooperatives, coffee technology training center and total quality management package as the commercially deliverable package of DCPAs and NCPA.
9. Develop NCPA as the specialty coffee association of Nepal (SCAN) promote its quality norms among farmers, processors, and international market.
10. Make the commodity associations and the National Tea and Coffee Development Board working collaborator along with the commitment of the government and bring development agencies, research institutions, and universities in the alliance forum.
11. Encourage commodity associations and cooperatives to develop and manage the infrastructural facilities for marketing agricultural commodities.

Coffee being the second largest traded commodity in the international market, and Nepal's biggest potentiality of production of specialty coffee will not exceed 2% of the global coffee consumption leaves the room for Nepal making its sustainable exports base for long run. Coffee will give Nepal a solution for soil conservation and livelihood for marginalized hill dwellers as well as can be the gateway for other agricultural commodities to promote production and marketing via the infrastructure built for production and marketing of coffee.

Writer: Advisor, Nepal Coffee Producers' Association (NCPA)
Feasibility Of Organic Coffee Production in Nepal

Prachanda Man Shrestha

1. BACKGROUND

Conventional agriculture is focused on achieving maximum yields of a specific crop based on a rather simple understanding that crop yields are increased by nutrient inputs and they get reduced through pests, diseases and weeds, which therefore must be controlled. Over the last few decades, the focus in agriculture shifted from mainly subsistence agriculture to market production. Due to reduced fallow periods, overgrazing or exploitative cultivation, many traditionally farmed areas face severe degradation. At the same time, higher yielding crop varieties have been introduced which are more prone to diseases.

It must be acknowledged that with the help of Green Revolution technologies crop yield increased tremendously, especially in the temperate zones. Several southern countries also experience the Green revolution as a success story. However, the success of the Green Revolution in the south was unevenly spread: while technology brought considerable yield increase in fertile river plains or irrigated land, it rather failed on marginal soils, which constitute the major part of the land in the tropics. As the fertile lands usually belong to the wealthier farmers, marginal farmers did not benefit greatly from the new technologies. One reason for its failure in marginal lands is the low efficiency of fertilizer application on tropical soils; unlike soils in temperate regions, many tropical soils do not retain chemical fertilizers well. The nutrients are easily washed out from the soil or evaporate as gas. The major part of the applied fertilizer may subsequently be lost (UNCTAD 2003).

Organic production is not merely concerned with a product, but also with the whole system used to produce and deliver the product to the ultimate consumer. According to IFOAM organic agriculture is a whole system approach based upon a set of processes resulting in a sustainable ecosystem, safe food, good nutrition, animal welfare and social justice. Organic production therefore is more than a system of production that includes or excludes certain inputs (IFOAM 2005).

Coffee in Nepal is predominantly grown by resource poor small farmers under marginal upland condition. Requirements of majority of the processor/traders is also grown coffee organically (without use of chemicals under shade condition). These situations point toward need of putting thrust on organic coffee production. This is also in line with Coffee Policy of HMG Nepal which has recognized coffee as a potential income generating crop and has emphasized the importance of organic coffee production.
Coffee is indigenous to Africa, with Arabica coffee reportedly originating from Ethiopia and Robusta from the Atlantic Coast (Koforidua region and in and around Angola) and the Great Lakes region, and today is widely grown throughout the tropics. It is second to oil as the most valuable item of international trade, and provides employment to over twenty million people in some of the poorest countries in the world. The top coffee producing countries in the world are Brazil, Colombia, India, Indonesia, Mexico, Puerto Rico, and Vietnam. However, there are over 70 countries in the world that produce coffee and smaller coffee-producing countries may produce gourmet coffee, which is highly valued by coffee lovers in the world (Ring Surf 2003-2004). It has been estimated that 52 countries in the world are producing coffee. Information presented in Figure 1 shows that the world production of coffee in the year 2000/01 was 112 million bags i.e. 6.7 million tons (69 million bags Arabica + 43 million bags Robusta) as compared to 99 million bags i.e. 5.9 million tons (65 million bags Arabica + 35 million bags Robusta) in 1996/97. The bulk of world’s coffee, however, is produced in Latin America and in particular in Brazil, which has dominated world production since 1840. Brazil is the world’s largest grower and seller of coffee. Vietnam, which expanded its production rapidly through the 1990s, now holds the number two position, bringing Columbia into third place and Indonesia into fourth (ITC 2002).

In use of Arabica coffee, Figure 2 shows that in the year 2000/01, South America produced 39 million bags, North America (including Mexico and Guatemala) 20 million bags, Africa 5 million bags and Asia and Pacific 4 million bags. In Asia and Pacific, India and Papua New Guinea are the biggest producers of Arabica coffee with 2000/01 production of 2 and 1 million bags respectively. Production of Arabica coffee in Asia and Pacific is steadily growing from 3.7 million bags in 1996/97 to 4.4 million bags in 2001/01 (ITC 2002).

The market share of organic products in Western countries ranges between 0.5% and 3% for food generally, but varies widely for different product groups. For instance, baby food in Germany and Denmark is reportedly more than 50% organic, and organic dairy products are best sellers as well, sometimes with a market share of 25%. Western annual growth rates for organic products as a whole
range from 10% to as high as 40%. This means that within five years, the market share in some countries might reach 10%. The market for organic coffee is difficult to estimate. However, in 2001/02 trade sources estimated world production of organic coffee at some 48,000 tons i.e. 800,000 bags. Different trade sources have varying views on growth prospects for organic coffee sales. Estimated consumption of organic coffee in 2002/03 presented in major consumer countries presented in Figure 3 shows that the total estimation of 700,000 bags is less than the production in 2001/02.

3. PRODUCTION, PROCESSING AND MARKETING OF COFFEE IN NEPAL

After the introduction of coffee in Nepal by the Monk Hira Giri in Aanepchaar, Galmi in 1938 AD, the crop remained unnoticed as a curiosity crop until 1970s. In late seventies, expansion of coffee as commercial crop to some extent took place when HMG imported coffee seed from India for distribution. The major shift to commercial coffee production took place in mid eighties when the coffee producers were able to sell coffee after the establishment of Nepal Coffee Company (NeCCo) in Manigram, Rupandehi district, in 1983/84, who collected dry cherry from the coffee producers and processed the coffee for domestic market. Until early 2000, coffee producers were not very sure of coffee being a source of income or income generating crop but the establishment of coffee market in the country had increased. Nepal coffee is ideally suited for production in specific international markets. However, the challenge is to improve the quality of coffee and produce coffee in a sustainable way.

3.1 Areas and Production of Coffee in Nepal

Coffee is presently known to be grown in about forty districts in Nepal. However, the coffee growing districts in eastern development region are not very suitable for coffee farming due to higher rainfall and probability of higher incidence of diseases and pests. Since coffee producers do not use chemical pest control measures, incidence of any disease in the eastern region could spread the diseases to other parts of the country too. The districts in far-west and mid-west development regions have low potential for coffee production due to the frequent drought problem. The major coffee growing districts where substantial amount of coffee being traded lie in Central and Western Development Regions namely Guwmi, Palpa, Arghakhanchi, Baglung, Syangja, Parbat, Kaski, Lamjung, Gorkha and Tanahu in the Western Region and Lalitpur, Sindhupalchowk, Xayar, Dhaingch and Ramchehp in Central Development Region.

According to information available, number of coffee producers have increased from 1,984 in the year 1996 to 12,000 at now. Similarly the area under coffee increased from 220 Ha in 1996 to 1075 Ha in 2005 and the production of dry cherry increased from 29 Mt in 1996 to 250 Mt in 2005 (NTCDB 2003, 2005 and Estimation for 2005)
Initially, coffee was planted as a contour plant for soil erosion control and other environmental protection practices. So the farmers regard coffee as an easy crop to grow, and agronomically less demanding. Usually no chemical fertilizers and insecticides/pesticides are applied. However, in those areas where infrastructure (roads, communication and other services) is well developed farmers might be using some external inputs like chemical fertilizer and pesticide in companion/iner crops specially in vegetables and fruits where commercial production of these crops exist. In Nepal, the majority of coffee producers are resource poor smallholder farmers. Coffee is predominantly planted in upland area as an additional/extra crop without disturbing the existing cropping system and on steep hillsides where other crops do not perform well under low input and low management conditions. There are few farmers who have started planting coffee under shade in larger number replacing the maize crop. The coffee production management system in Nepal can be categorized according to the following:

- Coffee produced with commercial fruits and vegetables with significant amount of external inputs.
- Coffee produced with fodder, firewood and other fruit trees with fewer amounts of external inputs.
- Coffee produced in kitchen garden and terrace rises and field boundary with very less or no external inputs.
- Coffee produced in marginal areas and forest with no external inputs.

Except for coffee produced with commercial fruits and vegetables in the areas near by markets and district Head Quarters, the rest of the coffee production management system could be converted into an organic coffee with simple intervention of organic soil fertility and moisture management, shade management, and production and use of cow urine based organic insecticide/pesticide. This has been demonstrated through the coffee farmer field schools implemented since the year 2003 in eight districts of Nepal. However, for the coffee to be exported as organic, there is a need of piloting the implementation of Internal Control System (ICS) for group certification to evaluate the feasibility of sustainable ICS under Nepalese condition.

3.2 Coffee Processing in Nepal

Quality of coffee produced not only depends on the coffee production management, but also post-harvest processing management at village and processor's (central) level. Preparing the harvested coffee cherries for market requires that the cherries be processed to separate the beans from the fruit. Coffee is processed mainly by either the wet or the dry method to produce green beans. Until the year 2001, dry processing of coffee was predominantly practiced in Nepal.

Though wet processing was introduced in Nepal in 1999, by AEC and subsequently by GARDEP in Gulmi and Arghakhanchi, wet processing was not adopted at the village level due to a number of problems related to the availability of technology and market. Until the year 2003 i.e. the harvest season of 2002/03, dry processing was predominantly practiced at village level. After the promotion of wet processing by CoPP, Helvetas in collaboration with Nepal Tree Crop Global Development Alliance, Winrock International in 2003, and initiation of wet processing at village level in 2004 i.e.
2003/04 harvest season, the coffee producers have been able to sell the fresh cherry immediately after harvest on an attractive price and coffee producers have realized the importance of coffee as an income generating crop. Presently, wet processing has been accepted and adopted by the farmers, pulper operators and processor/traders in Nepal. Wet processing has not only done value addition at the village level but also improved the quality of coffee exported in the international market (Lama, P.K. 2005). The shift from dry processing to wet processing has also increased the income of farmers when same amount of coffee is sold as fresh cherry to pulper operators instead of drying the fresh cherry to produce dry cherry (Shrestha 2005).

Estimation of dry and wet processed green beans marketed in 2004 and 2005 (Table 1) shows that the production of wet processed green beans has more than doubled from 2004 (27% of total green bean marketed) to 2005 (58% of total). The trend on increase in amount of wet processed green beans will be continued until the international buyers are interested in it and continuous effort will be done to improve the quality of coffee at village and processor level.

To further improve the quality of coffee, study on wet processing needs to be done and the technology used at present should be improved. Monitoring of the pulping centers is also essential to provide on the spot technical assistance and collect information on collection of fresh cherry and production and sale of dry parchment. Testing of different types of pulpers in 2004 and 2005 has shown that drum pulper is appropriate for polishing bigger amount of fresh cherry (CoPP 2004 and 2005).

### 3.3 Coffee marketing in Nepal

In Nepal, coffee is predominantly consumed in the form of imported instant coffee, which is easy to prepare. The consumption of Nepali/filtered coffee in Nepalese society is so far limited to elite groups. The domestic Nepali/filtered coffee market relies on the tourists, expatriates and higher income Nepalese. The present situation of the domestic market is not stable, and it is highly dependent on the number of tourists visiting Nepal. The sale of Nepali coffee varies proportionately with the increase or decrease in the number of incoming tourists.

Estimated sale of coffee in the domestic and international market in 2004 and 2005 (Figure 4) shows that consumption of Nepali coffee in domestic market was 37 mt (16% of total) in 2005 as

#### Table 1. Dry vs. Wet Processing of Green Beans Marketed in the Years 2004 and 2005

<table>
<thead>
<tr>
<th>Year</th>
<th>Dry Processed</th>
<th>Wet Processed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mt</td>
<td>%</td>
<td>Mt</td>
</tr>
<tr>
<td>2004</td>
<td>87.5</td>
<td>73</td>
<td>19.1</td>
</tr>
<tr>
<td>2005</td>
<td>43.3</td>
<td>42</td>
<td>60.1</td>
</tr>
</tbody>
</table>

#### Figure 4: Comparison of Coffee Sales in 2004 and 2005

**DRINKING COFFEE EVERY DAY CAN KEEP THE DOCTOR AT BAY**
The trend of export of Nepali coffee to international market is very encouraging. Export of Nepali coffee almost doubled from 38 Mt in 2004 to 66 Mt in 2005. With the increase in export of washed coffee (19 Mt in 2004 to 51 Mt in 2005) and the trend of increase in number of pulping centers (68 in 2004, 131 in 2005 and estimated 213 in 2006), the need for serious monitoring of the pulping centers to produce quality parchment at the village level so that the quality of coffee going to the domestic as well as international market does not deteriorate (CoFP 2005).

Though quality of coffee produced in Nepal has potential both for domestic and international market, there is still much to be done to upgrade and bring consistency in the quality of coffee. Nepal can not compete with other coffee producing countries by producing regular coffee. Nepal is producing limited quantity of high quality specialty coffee and regular coffee produced else where are cheaper as compared to Nepalese coffee. Target of the Nepal should be the niche market by producing better quality coffee. Research and analysis done by Mr. Daniel Giovannucci for The Nepal Tree Crop Global Development Alliance, Winrock International recommended to focus on quality and consistency than volume of production with greater attention on productivity (Giovannucci 2005).

Targeted market and requirements of coffee production and processing of the major processors/traders in Nepal shows that Arabic coffee grown with shade under organic management system and processed with wet processing system need to be the focus to develop coffee sub-sector.

4 SCOPE FOR ORGANIC COFFEE PRODUCTION IN NEPAL

Western countries have developed excessive legislation for organic products. The conditions that must be met before coffee may be marketed as organic are both comprehensive and well defined. No coffee may be brought to the marketplace and labeled organic unless it is proved to conform to the regulations. In other words, coffee can be marketed as organic only when it is certified by a recognized organization or certifier, based on regular inspection of all stages of production, processing, transporting and roasting of the coffee.

Growing any organic product, including organic coffee, is more than just leaving out fertilizers and other agro-chemicals. Coffee produced in this way should instead be called 'natural' coffee and, to the surprise of many, the industry looks upon this as non-sustainable production. This is because, in the long run, the soil will be depleted by natural production, which is often referred to also as 'passive cultivation' or 'organic by default'.

For production of organic coffee i.e. to achieve sustainable production, a high level of technology is not required, but a commitment to improve the productivity and quality of coffee through use of locally available resources at right time is required. In organic coffee production, agronomic practices like soil conservation, composting, manual wetting, recycling of organic wastes, shade management, etc., form the essential requirements, which demand a larger amount of labor. The principle of sustainable agriculture is that a value corresponding to that harvested should be returned.

A CUP FOR YOU! CAN KEEP KISSING PRETTY
to the soil. All possible methods have to be used to enhance the fertility of the soil. This is why passive production of coffee, even when no chemicals are used, is viewed as non-sustainable and not as organic. As the demand for animal manure is high, appropriate measures like sufficient livestock with fodder and forage crops is essential which again demands greater labor requirement. Thus labor is an important investment in organic coffee production.

In a case study conducted in Mexico, it is reported that organic coffee estates use 82% of total production costs towards labor as against 85% in traditional estates and 44% in intensively cultivated coffee estates. The net return for the organic farm is approximately 10 percent lower compared to intensively cultivated estate and approximately 80 percent higher in traditional coffee growing. The price of organic coffee is reported to be double that of conventional coffees.

Experience of conversion of coffee plantations to organic management system showed that traditionally cultivated plantations with low to medium yield levels (i.e., above 250-400 kg/acre) can be easily converted to organic without any significant yield reduction. However, when the intensively managed estates with high yield levels (i.e., above 500 kg/acre) are converted, there will be substantial yield reduction, up to 30% in the initial 3 to 4 years, followed by yield stabilization in the next 2 to 3 years. If managed systematically, these plantations would reach original high productivity level within 6-7 years. (CCRI 2000)

Concept of organic coffee production was introduced in Madan Pokhara, Palpa in 1997 AD. Thereafter the coffee producer groups and their association adopted and promoted the organic coffee production concept. The coffee producers from that time have consistently avoided the use of external inputs including chemical fertilizers and insecticides/pesticides in coffee plate, CEPPE Helvetas has been promoting simple technologies of improving the available farm yard manure, production of compost using biomass and collection of urine for application and use in production of organic fertilizer and/or pesticide. Any coffee producer using unacceptable chemical inputs in coffee plants are penalized by relinquishes his/her membership from the association.

Nepal's coffee production practices, though claimed as organic by default, are not fully organic but more close and oriented to organic production than inorganic, which facilitates the adoption and conversion from current practices to fully organic state.

Coffee production in Nepal offers a great scope for production of organic coffee, as the conditions in this country are favorable for organic coffee production. Some of the natural advantages in Nepal are:

- Coffee is mainly cultivated under shade trees of diversified nature under upland rain-fed condition. Growing under shade has several advantages. Shade trees provide a natural habitat for vast population of birds and natural enemies of insect pests/diseases, help in reducing the soil erosion, contribute towards the fertility of coffee soils by recycling nutrients in the form of leaf litter and finally protect the coffee bushes from vagaries of climate.

- Traditional farming practices such as use of farm yard manure, composting, manual weeding etc., are typical practice of the resource poor small farmers.

- Availability of sufficient labor (family) for labor intensive operations like digging hole, manuring, planting, picking, drying, etc.

---

**BETWEEN AND BETWEEN HEALTHY COFFEE IN BETWEEN**
The coffee production system in Nepal is environmentally friendly with use of locally available resources and no use of external inputs/chemicals.

In addition to this, not only the guiding principle of coffee producers organization is to grow organic coffee, but also the requirement of the majority of the coffee processor/trader is coffee produced under organic management system even if not certified. The focus of HMG Nepal's Coffee Policy on organic coffee production has added impetus towards the organic coffee production in Nepal.

Due to the growing condition and location of the coffee growing areas (remote in majority of the cases) coffee produced in Nepal is organic though not certified except for areas in market centers and district headquarters/municipalities where commercial vegetable and fruit production is practiced. This could be the reason, though not permissible, the processor/traders sale Nepali coffee as organic coffee in the domestic market. It is also true that there is a better potential for production of organic coffee in Nepal. However, the concept of organic coffee production is yet to be thoroughly understood by the producers and processors/traders. Major constraints of organic coffee production in Nepal are as follows:

- Lack of proper understanding of organic standard and regulations
- Lack of research and extension support services
- Poor production and on-farm post-harvest quality management practices
- Lack of high yielding varieties and high quality seed/planting materials
- Existing higher price of fresh/dry cherry as compared to international market; and big range of price of dry parchment
- Absence of minimum quality standard and quality control measures
- Unfair competition among processor/traders and lack of transparent market system
- Coffee presently sold in international market is on the basis of personal relation, not on a competitive basis on quality and consistency of taste
- Inconsistency in taste of coffee
- Lack of knowledge and experience on Group Certification/Internal Control System
- Lack of National Program on Organic Production.

With the introduction of Internal Control System for Group Certification by District Cooperative Federation, Galeri and initiation of Internal Control System by CoPP Helvetas through DCPC, NGO, the feasibility of sustainable Group Certification will be evaluated under Nepalese condition. However, there is a need for sustained efforts from all the concerned to promote the concept of organic coffee production in Nepal.

5. CONCLUSION AND RECOMMENDATION

Coffee has been recognized as income generating crop which is also a source of foreign currency income and import substitution. Coffee has been able to increase the income of resource poor small farmers supplementing to the food and nutrition security. However, there are problems that need to be addressed to develop coffee sub-sector as a whole. Stakeholders need to have
coordination and collaboration through a national level networking to support production, processing and marketing of coffee in a sustainable and environment friendly way.

Lack of research on organic coffee production and processing is one of the major bottlenecks for the development of coffee sub-sector. Participatory technology selection and dissemination need to be done to improve the productivity and quality of organic products including coffee.

Requirement of the majority of the Nepali processor trader to market the coffee is Arabica coffee grown under organic production system. However, only 1000 farmers in Guri, Arghakhanchi and Baitung under the collection area of District Cooperative Federation, Guri are under Internal Control System (ICS). Processor/trader should not be allowed to market the coffee as organic until and unless the coffee is either organically certified or at least ICS is effective.

Coffee policy must emphasize on production of organic policy. There should be a movement towards organic agriculture in Nepal. Strict regulations should be implemented to identify organic management system.

One of the reasons of sale of Nepali coffee in the international market is the location of production area and the coffee produced by resource poor small farmers. Organic certification could be expensive so sustainability of the organic certification without donor support should be studied and attempt should also be made to certify Nepali coffee as Fair Trade Coffee.

International coffee experts have recommended to further separate the coffee according to the altitude, coffee grown between 800 to 1100 masl and above 1100 masl. According to Mr. George Willekis of Holland Coffee Inc. coffee grown above 1100 masl could fetch additional premium (Willekis 2004). Based on the expert advice, to improve the quality and consistency in the taste of coffee there by creating a reputation of Nepalese coffee, coffee produced in Nepal should be collected on the basis of two ranges of altitude and market should be explored for these.

According to the processor/traders, wet processed coffee of Nepal has been recognized by international buyers of Japan and Europe as a high quality coffee with potential for further improvement. Study should be done and attempt should be made to further improve the quality of coffee not only by improving the production management system at the producer level but also wet processing at the village and central level.

Minimum quality standard of coffee is not defined for Nepalese coffee. Attempts should be done to define the quality and institutionalize the quality monitoring system.

Lack of coordination among traders result in collection of low quality coffee to sustain the coffee sub-sector and create a reputation of Nepali coffee in the international market, traders should be organized and coordinate with each other for collection of coffee.

Coffee promotion activities need to be concentrated in Central and Western Development Regions. Coffee area expansion specifically in the Eastern Development Region should be discouraged to avoid competition with tea and also avoid possibility disease epidemics.

Writer: Team Leader, Coffee Promotion Project, Holoven Nepal

A CUP FOR YOU CAN KEEP KISSING PRETTY


Lama, P. K., 2005. Feed back on quality of wet processed coffee from the Japanese buyer to Everest Coffee Mill.


Status and Potentiality of Coffee Cultivation in Nepal

Introduction

Coffee is an emerging commercial crop of Nepal. Previously, it was introduced in Nepal only to test the adaptability as a new plant in 1944 AD but now it is expanding as a mix crop with fruits (citrus, guava, peach, banana etc) and fodder, especially in upland and sloppy uplands of mid hills.

The crop is grown elsewhere at an altitude range of 150 masl (meters above sea level) to 1500 masl where the rainfall is moderate, between 1500 mm to 2200 mm. There are three species of coffee grown commercially in the world, arabica, robusta and liberica. Among them, arabica is a main cultivar being cultivated in the mid hills of Nepal. Coffee cultivation became attractive to the Nepalese farmers because it can be incorporated in the present cropping pattern with minimum effect on the production of main crop. The processing of dry cherry does not require complicated technology and easily handled by farmers. The dry cherries can be stored for one year without affecting the quality of coffee, if stored properly. Coffee cultivation is cost effective and suitable to agroecological as well as climatic condition of mid hills of Nepal.

Present scenario

Available statistics indicate that coffee is being cultivated commercially in more than thirty-three districts of Nepal. Estimated area coverage of coffee was 925.2 ha and dry cherry production was 217.6 mt in the year 2003/2004. The area under coffee is increasing and its concentration is more in western development region followed by central and eastern development region. Cultivation of coffee has not been done in mid-western and far western region of Nepal from the commercial point of view (Table 1).

DRINKING COFFEE EVERY DAY CAN KEEP THE DOCTOR AT BAY
### Districts

<table>
<thead>
<tr>
<th>Districts</th>
<th>Area (ha)</th>
<th>Production (mt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paipa</td>
<td>174.0</td>
<td>26.1</td>
</tr>
<tr>
<td>Gulmi</td>
<td>77.0</td>
<td>35</td>
</tr>
<tr>
<td>Arghakhanchi</td>
<td>20.0</td>
<td>7</td>
</tr>
<tr>
<td>Syangja</td>
<td>112.0</td>
<td>25</td>
</tr>
<tr>
<td>Parbat</td>
<td>29.0</td>
<td>5</td>
</tr>
<tr>
<td>Lamjung</td>
<td>36.0</td>
<td>10.3</td>
</tr>
<tr>
<td>Kadi</td>
<td>350.0</td>
<td>8</td>
</tr>
<tr>
<td>Lalitpur</td>
<td>40.0</td>
<td>21</td>
</tr>
<tr>
<td>Sindhupalchok</td>
<td>20.0</td>
<td>12</td>
</tr>
<tr>
<td>Makati</td>
<td>2.5</td>
<td>1</td>
</tr>
<tr>
<td>Gorkha</td>
<td>26.7</td>
<td>5</td>
</tr>
<tr>
<td>Baglung</td>
<td>22.6</td>
<td>16.1</td>
</tr>
<tr>
<td>Jhapa</td>
<td>12.0</td>
<td>4.5</td>
</tr>
<tr>
<td>Ilam</td>
<td>25.0</td>
<td>4.4</td>
</tr>
<tr>
<td>Kavre</td>
<td>110.0</td>
<td>12</td>
</tr>
<tr>
<td>Nuwakot</td>
<td>48.0</td>
<td>12</td>
</tr>
<tr>
<td>Dhading</td>
<td>12.5</td>
<td>2</td>
</tr>
<tr>
<td>Udaiyapur</td>
<td>2.0</td>
<td>1</td>
</tr>
<tr>
<td>Sankhuwasabha</td>
<td>41.0</td>
<td>1</td>
</tr>
<tr>
<td>Tanhu</td>
<td>39.0</td>
<td>5.2</td>
</tr>
<tr>
<td>Makawanpur</td>
<td>11.6</td>
<td>0.5</td>
</tr>
<tr>
<td>Other districts</td>
<td>10.3</td>
<td>3.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>924.2</strong></td>
<td><strong>217.6</strong></td>
</tr>
</tbody>
</table>

**Source:** MOAC, 2004

Trend of area coverage of coffee is encouraging. It could be an indication of potentiality of coffee cultivation in Nepal, but adoption of appropriate package of cultural practices and international market quality production system are very important factors to be considered for promotion of coffee in Nepal. Increment of area coverage and production of coffee is not sufficient to maintain sustainable productivity of coffee. Good support of appropriate technologies for organic production and access to domestic and international market are very important for the promotion of coffee in Nepal. Government and non-government agencies must consider the factors seriously to promote coffee cultivation in Nepal while preparing plan and implementing the programmes.

Major factors responsible for low production and productivity of Nepalese coffee are unscientific plantation, poor management of orchard disease, insect pest, shade and nutrient management and regular maintenance of coffee orchard (training, pruning, irrigation, and cultural operation).

---

ACUP FOR YOU CAME KEEP MESSING PRETTY

---
Present situation of coffee cultivation clearly indicates that there is sufficient opportunity to increase productivity as well as quality by developing and adopting appropriate technologies of coffee cultivation.

Nepal imports considerable amount of instant coffee from India and other overseas counties, which can be replaced by comparatively cheaper domestic products through efficient marketing system. Recent import and export trend of coffee indicates that there is a need to increase the production of coffee for the domestic consumption itself. Increased coffee production not only provides additional income to the coffee grower but also fulfills the country's demand internally and provides raw material to newly establish processing plants. Coffee cultivation has also multi-dimensional positive effect on environment and job opportunities in rural sector. Nepalese coffee also has potentiality to compete international niche market if it is produced by organic cultivation system.

Concerned organizations

National Tea and Coffee Development Board is a semi government organization having the mandate of whole-sale development of coffee in Nepal. Similarly, Nepal Agricultural Research Council (NARC) is a national agriculture research authority working as an autonomous research organization. The council has recently established a separate division (Commercial Crops Research Division) to implement research program in order to generate technologies for commercial crops including coffee. Mother research and development organization named National Agricultural Research and Development Fund (NARDF) is related to coffee research and development but it has not given emphasis for research and development of coffee. Department of Agriculture (DOA) has a section named Tea and coffee development section, which works for development of coffee through the network of District Agriculture Development Office (DADOs). International non-government organizations (INGOs) such as Coffee Promotion Projects (CoPP) Helvetas-Nepal, Winrock International, International Development Enterprises, Nepal (IDE/Nepal) are also involved in promotion of coffee. Besides, numerous local non-government organizations (NGOs) have been implementing programmes on coffee mainly focused on production and distribution of coffee seedling without testing the suitability of varieties to different areas of nation.

Nepal Coffee Producers' Association (NCPA) is a farmer's forum working to standardize coffee farming practices among farmers and providing marketing support to the farmers' groups. The association has been working since 1991, became federation and registered on June 2005. It has established a very good network of coffee growers through District Coffee Producer's Associations (DCPA) in major coffee growing districts. Some farmer's cooperatives are also involved in production and marketing of organic coffee and able to export organic coffee in considerable amount.

Research and development activities

Futomology and Plant Pathology Divisions of NARC have identified diseases and insect pest of coffee in Syangja and Kavrepalanchowk district with the financial support of Coffee Promotion...
Helvetas Nepal during September 2003 to August 2004. Diseases and insect pests of economic importance have been scientifically identified along with other common cultivation problems. The important diseases identified and confirmed were Anthracnose (Colletotrichum gloeosporioides Penz.), Brown eye-spot (Cercospora coffeicola), and Wilt disease (Fusarium spp.). Minor diseases like scotoy mold and algal spots were also identified. The major economically: important insect pests identified were white stem borer (Chlorophorus annulatus and Xylostichus smei), red stem borer, green scale, mealy bugs, aphids, and snail.

Presently, research activities on variety selection and soil management have been started by soil science division, Khamaltar and agriculture research station, Malepatah,Pokhara, NARC, in collaboration of coffee growers of Syanga district. CoPP Helvetas-Nepal and IDE/Nepal have initiated some action research on coffee through Farmers Field School (FFS) with collaboration of DADOs and variety adaptation testing with collaboration of DCPAs. An experiment on performance evaluation of different varieties of coffee has been started at Pathibhul agriculture farm in collaboration with government and non-government agencies, recently.

Department of agriculture, INGOs and NGOs have been conducting activities on coffee seedling production; distribution and training and CoPP Helvetas Nepal have done appreciable work to form farmers’ group to establish networking of coffee growers, and developing the marketing system of coffee within the country as well as abroad. Involvement of business group for overseas export of Nepalese coffee has created positive indications in international coffee trade.

Challenges and opportunities

Nepalese coffee could be an important exportable agriculture product at highland specialty coffee for international trade if produced organically certified and able to meet the standard of international niche market. But it is very important to develop package of cultivation practices including appropriate technologies for disease, insect pest and nutrient management, selection of suitable varieties for different agro-ecological zones for organic cultivation of coffee, which needs big amount of money to conduct long-term research activities to support the coffee growers of Nepal. Coffee is a perennial crop and needs at least four to five years experimental work to develop a technology. At present, NARC is not in position to invest huge fund for the research on coffee though it has sufficient infrastructure and expertise to conduct the research in this line. NAREP has no given emphasis to the research work in coffee crop. Though it is a very important crop from trade point of view and research data are considered as prerequisite for international trade of agricultural products. NGOs involved in the promotion of coffee are not willing to invest money for long-term research work though it is crucial for sustainable production and productivity of coffee crop, rather they want to maintain their presence in this field being involved in marketing and extension activities. Efforts of NGOs always have been to attract fund from donor agencies in the name of coffee and to implement seedling production and training activities in order to show the large coverage of scarce and number of farmers. Generally non-government organizations prefer to work in isolation and reluctant to be transparent and collaborative work.
with other related organizations. It never has been thought that the coffee development work should be started from the point of technology generation as a pre-requisite. Once we become able to produce quality coffee in cost-effective way, expansion of coffee-growing area as well as production and productivity become possible and sustainable. Present efforts made to expand acreage under coffee by planting untested varieties, without managing the proper shade and without developing the suitable technologies may create problems related to fruiting, fruit setting, drying of plant and disease and insect pest infestation when the coffee orchards come into fruiting stage. It is the right time to review research and development work performed by public and private organization and the total budget expend in the name of coffee whether it is satisfactory and justifiable. After analyzing the total work on coffee performed by private and public sector of nation future activities should be planned on need and priority basis to address the basic problems. It is also important to create common working forum for public and private agencies for overall development of coffee without duplicating work to minimize the cost and obtain the genuine output.

Conclusion

Coffee has good potentiality in Nepal if it is grown organically and become able to establish in international niche market as highland coffee of specialty. Coffee could be a good source of income for farmer’s household as well as assurance of foreign currency for nation. Resources available in the nation, which could be used for coffee promotion are either underutilized or misused due to various reasons. Efforts made by private organizations for increasing the area coverage of coffee crop without research and technological support is not in right track and may not be beneficial to coffee growers in long run. Good coordination among private and public as well as research and development oriented organizations is the must for overall development of coffee in Nepal. Measure of fund availed in the name of coffee promotion and duplication of work due to lack of coordination should be discouraged by government and responsible non-government organizations involved in promotion of coffee. A common working forum should be created to bring the researchers, development worker, donors, policy makers, traders and farmers in one place to translate the commonly made national coffee promotion strategic working plan into action for best utilization of available resources and to obtain genuine output.

References


A CUP FOR YOU CAN KEEP KISSING PRETTY

Wrice: Senior Scientist, Entomology Division, Khumaltar NARC.
Coffee Brewing

(कफी बनाएँ, पिएँ तयारी)

रुपांतरण समय, सशस्त्रता जीवन।
Brewing a Great Cup of Coffee

1. Roasting

- Choose the right temperature and time to ensure the coffee beans are roasted to the desired degree of doneness.

2. Grinding

- Select the appropriate grind size for the brewing method being used.

3. Brewing

- Measure the correct amount of coffee and water, and adjust the brewing time and temperature.

4. Serving

- Serve the coffee at the optimal temperature and with the right amount of milk and sugar.

This process can be automated using various technology and equipment to ensure consistent quality and flavor.

---

**Brewing a Great Cup of Coffee**

1. **Roasting**
   - Choose the right temperature and time to ensure the coffee beans are roasted to the desired degree of doneness.

2. **Grinding**
   - Select the appropriate grind size for the brewing method being used.

3. **Brewing**
   - Measure the correct amount of coffee and water, and adjust the brewing time and temperature.

4. **Serving**
   - Serve the coffee at the optimal temperature and with the right amount of milk and sugar.

This process can be automated using various technology and equipment to ensure consistent quality and flavor.

---

**U.S. Craft Beer Awards**

- How to brew a great cup of coffee.
- The secrets of home brewing.
- Choosing the right equipment.

---

**Brewing a Great Cup of Coffee**

1. **Roasting**
   - Choose the right temperature and time to ensure the coffee beans are roasted to the desired degree of doneness.

2. **Grinding**
   - Select the appropriate grind size for the brewing method being used.

3. **Brewing**
   - Measure the correct amount of coffee and water, and adjust the brewing time and temperature.

4. **Serving**
   - Serve the coffee at the optimal temperature and with the right amount of milk and sugar.

This process can be automated using various technology and equipment to ensure consistent quality and flavor.

---

**Brewing a Great Cup of Coffee**

1. **Roasting**
   - Choose the right temperature and time to ensure the coffee beans are roasted to the desired degree of doneness.

2. **Grinding**
   - Select the appropriate grind size for the brewing method being used.

3. **Brewing**
   - Measure the correct amount of coffee and water, and adjust the brewing time and temperature.

4. **Serving**
   - Serve the coffee at the optimal temperature and with the right amount of milk and sugar.

This process can be automated using various technology and equipment to ensure consistent quality and flavor.

---

**Brewing a Great Cup of Coffee**

1. **Roasting**
   - Choose the right temperature and time to ensure the coffee beans are roasted to the desired degree of doneness.

2. **Grinding**
   - Select the appropriate grind size for the brewing method being used.

3. **Brewing**
   - Measure the correct amount of coffee and water, and adjust the brewing time and temperature.

4. **Serving**
   - Serve the coffee at the optimal temperature and with the right amount of milk and sugar.

This process can be automated using various technology and equipment to ensure consistent quality and flavor.

---

**Brewing a Great Cup of Coffee**

1. **Roasting**
   - Choose the right temperature and time to ensure the coffee beans are roasted to the desired degree of doneness.

2. **Grinding**
   - Select the appropriate grind size for the brewing method being used.

3. **Brewing**
   - Measure the correct amount of coffee and water, and adjust the brewing time and temperature.

4. **Serving**
   - Serve the coffee at the optimal temperature and with the right amount of milk and sugar.

This process can be automated using various technology and equipment to ensure consistent quality and flavor.
(5) Tassajara (Freshness)

Usage can vary, so always check the freshness of the beans; the best beans will be roasted within a few days of purchase. If the beans have been sitting for a long time, their flavor may have diminished. Store coffee in a cool, dry place away from direct sunlight.

(6) Brewing
during a rainy day, I prefer to make French Press coffee. It is a simple and efficient method that allows for easy cleanup.

French Press Method
1. Preheat the press pot.
2. Rinse the press pot with hot water.
3. Place the ground coffee in the press pot.
4. Pour hot water over the coffee, stirring gently.
5. Let the mixture steep for 4-5 minutes.
6. Press the plunger down completely.
7. Serve immediately.

Brewing:
1. Preheat the press pot.
2. Rinse the press pot with hot water.
3. Place the ground coffee in the press pot.
4. Pour hot water over the coffee, stirring gently.
5. Let the mixture steep for 4-5 minutes.
6. Press the plunger down completely.
7. Serve immediately.

Vaccum Flask/Electric Coffee Brewer
This method involves brewing the coffee in a vacuum flask or a French press, which helps preserve the aroma and flavor of the coffee. To use, fill the flask with hot water and steep the coffee for 4-5 minutes. Then, pour the coffee into a cup and enjoy.

Metallic Press
This method involves using a metallic press to萃取咖啡。它适用于小型咖啡馆，可以快速制作出高品质的咖啡。使用时，将咖啡豆放入压滤机中，倒入热水，盖上盖子，静置4-5分钟即可。
(g) Expresso (Espresso)

Я брал молочные продукты (milk) и кофе (Espresso), а также сливочное масло (butter) и хлеб (bread).

(g) Сливочное масло (butter) и хлеб (bread) — основные компоненты бутербродов (sandwich).
चिया / कफी रोपी. वातावरण जोगाओळी
बहाउँलाई अव खेती गर्न पाउने
अघि नै चलिआलाई बार्तार भएको हुँ।
गतै खेती छौट्टै अव किन अघि लागाउँ?
जगाप्रमाणे प्रसारित दो खेतीलाई लाग्ने।

सम्मिलीम सकेत भएती भने
कर्मीहरू फाइडरक दुर्भनी भने।

प्रेमाला न्यायका जाँच, बार्तार, खेतीहरू रउन
ती दहाइमा अव खेती गर्नु पर न सक्नु।
सबै दहाइम समेत प्रेमाला सबै समुपोषण गर्न
लाग्न अव सबै दहाइम कर्ती खेती गर्न।

जमिनको मुन्नाउँ खुम्ले
अवशेष गर्न फाइडर निजम गर्नेद।

मानविका सम्पर्कहरू अत्याधिक हुन्छ।
जसलाई गर्नेछ हामिलाई परिस्थितिहरूपन।
काज हुँदै सम्पर्क र प्रसारित हुनु
कर्ती खेती गर्नु पर्ने अघि दुर्भनी गर्न।

सकिन्द्र नेपाल धन्तालक
दो देशालाई विवेचना अव विचारण।

अधिकतम खेतीहरू गार्दू गर्न
बार्तार खेती विवेचना गर्ने नै भए भए।
नेपालको खेतीहरू निर्देशन गर्ने एर्नेस्टी मात्रहो
अघि खेती गर्न मुन्नै सबै समुपोषण हो।

कार्यकारी-२, धन्तालक
नेपाल

दिखा / कर्मी रोप्ती, विशेष भमा आउँलाई गर्दै।
1. **Mechanical Measures**

- **Bhi** (Thy & Uppala) Bhi (Thy & Uppala) कोण की वैज्ञानिक भीतरी की गतिविधियों की तुलना के लिए एक सामान्य रूप से वर्णित किया गया है।
- **Kabarcha** (Thy & Uppala) कोण की वैज्ञानिक भीतरी की गतिविधियों की तुलना के लिए एक सामान्य रूप से वर्णित किया गया है।

2. **Chemical Methods**

- **Neem Oil** (1%) पथरीय दीवार की तरह सामान्य रूप से वर्णित किया गया है।

3. **Biological Methods**

- **Beauveria bassiana** (1%) पथरीय दीवार की तरह सामान्य रूप से वर्णित किया गया है।
নেপালামা কফী রোম রিষটে বিকাস

কফীর প্রাক। ভগ্নী

নেপালামা কফীর কক্ষগুলো মুখ্যত থেমে: ২১১১প গুনী সিল্পী, অভিজ্ঞতা বৃদ্ধি হয়ে নেমেছে স্থানীয় তেল কফীর ফিউল। একে সমাপন করার প্রচেষ্টা যেমন তেল কফীর ফিউল। ঐতিহ্য সহিত কফীর বিকাস অপ্রতিফলিত করা হয়। এই প্রচেষ্টা বিকাস অপ্রতিফলিত করা হয়।

নেপালামা কফীর কক্ষগুলো মুখ্যত থেমে: ২১১১প গুনী সিল্পী, অভিজ্ঞতা বৃদ্ধি হয়ে নেমেছে স্থানীয় তেল কফীর ফিউল। ঐতিহ্য সহিত কফীর বিকাস অপ্রতিফলিত করা হয়।
(3) विधि / कविता रोती / वाचनरी जोगी
ರಾಷ್ಟ್ರೀಯ ಚಿಯಾ ತತ್ತವ ಕಾಫಿ ವಿಕಾಸ ಯೋಜನಾನ್ ಏ ಸಾರೂರವಾಗಿ ಕಾರ್ಯಾಚರಣೆ ಜಾನಿಸಿಕೋ.
१८) करी संस्करण ग्रीष्म ६ गटक ।

२१) हालसम १५,००,००० भ्रमण यही पिचा काटिङ्गरा बुजुर्ग अनुसार प्रमाण गरिएको ।

२२) राष्ट्रपति पिचा गतित २०६७ लागु ।

२६) बजार व्यवसायिकमा महत्त्व गर्न World-O-Cha Festival २००१, जानकारी पिचा ब्यापारी र बोईको ब्यापारी लिएको ।

२७) विद्यालयको क्षेत्र भिकार मा आ २०७२/७३ ममता ५६६० हेदिएत जनमता पिचा क्षेत्र विस्तार भएको छ ।

२९) विद्यालयको उत्तरदाता आ २०७२/७३ मा २४०००००२ के जी. भएको छ ।

३४) कर्मीको उत्तरदाता आ २०७२/७३ मा २५० भने टन बमस भने ४५ वर्ष १००० हेदिएत रोको छ ।

३५) नेपाल अन्तरराष्ट्रिय प्रमुख गर्ने क्षेत्रमा पिचा बजार श्वेतमा- काउँटम्स, भास्पुर, तलितपुर, रिबाटपुर, थापाताङ, नालाकोट ।

३६) पिचा क्षेत्र विस्तारको कारण नूतनपटको राष्ट्रियालयमा २०५१ मा पिचा विस्तार व्यवस्था व्यवस्था ।

३७) पिचा क्षेत्रको विस्तारमा कमरा सहकारी माध्यम लागु गरे उद्धोले दोलखा, सोखु, अंतरराष्ट्रीय, नूतनपटक, राष्ट्रिय भिकारमा सहकारी मुख गरी पिचा विस्तार तर्फ सम्बन्ध ।

३८) राष्ट्रपति कर्मी पिचा २०६२ देखि सीखाउ ।

प्रकाशन : बोईको सचिवालय
<table>
<thead>
<tr>
<th>F.Year</th>
<th>Tea tea plantation Area in hectares</th>
<th>Tea Production in Kg.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Private NTDC</td>
<td>Small Holder</td>
</tr>
<tr>
<td>1993/94</td>
<td>03/04</td>
<td>03/04</td>
</tr>
<tr>
<td>1994/95</td>
<td>03/04</td>
<td>03/04</td>
</tr>
<tr>
<td>1995/96</td>
<td>03/04</td>
<td>03/04</td>
</tr>
<tr>
<td>1996/97</td>
<td>03/04</td>
<td>03/04</td>
</tr>
<tr>
<td>1997/98</td>
<td>03/04</td>
<td>03/04</td>
</tr>
<tr>
<td>1998/99</td>
<td>03/04</td>
<td>03/04</td>
</tr>
<tr>
<td>1999/2000</td>
<td>03/04</td>
<td>03/04</td>
</tr>
<tr>
<td>2000/2001</td>
<td>03/04</td>
<td>03/04</td>
</tr>
<tr>
<td>2001/2002</td>
<td>03/04</td>
<td>03/04</td>
</tr>
<tr>
<td>2002/2003</td>
<td>03/04</td>
<td>03/04</td>
</tr>
<tr>
<td>2003/2004</td>
<td>03/04</td>
<td>03/04</td>
</tr>
<tr>
<td>2004/2005</td>
<td>03/04</td>
<td>03/04</td>
</tr>
</tbody>
</table>

नेपालमा चिया खेतीको रोपण, क्षेत्रफल र उत्पादन निर्वाण

TOTAL TEA PRODUCTION AND TEA PLANTATION AREA
### Tea Plantation And Production

**2004/2005**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>District</th>
<th>Garden</th>
<th>Small farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Area (ha)</td>
<td>Production (kg)</td>
</tr>
<tr>
<td>1</td>
<td>Jhapa</td>
<td>6107</td>
<td>7241970</td>
</tr>
<tr>
<td>2</td>
<td>Ilam</td>
<td>1347</td>
<td>3362984</td>
</tr>
<tr>
<td>3</td>
<td>Dhankuta</td>
<td>382</td>
<td>104458</td>
</tr>
<tr>
<td>4</td>
<td>Panchet</td>
<td>219</td>
<td>62880</td>
</tr>
<tr>
<td>5</td>
<td>Terathum</td>
<td>23</td>
<td>4750</td>
</tr>
<tr>
<td>6</td>
<td>Sindhpukhok</td>
<td>150</td>
<td>35000</td>
</tr>
<tr>
<td>7</td>
<td>Other</td>
<td>684</td>
<td>4000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>9859</td>
<td>7789891</td>
</tr>
</tbody>
</table>

### Orthodox and C.T.C. Tea Plantation Area and Production

**2004/2005**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Variety</th>
<th>Orthodox</th>
<th>C.T.C</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Area (ha)</td>
<td>Production (kg)</td>
<td>Area (ha)</td>
</tr>
<tr>
<td>1.</td>
<td>Garden</td>
<td>2804</td>
<td>547923</td>
<td>6107</td>
</tr>
<tr>
<td>2.</td>
<td>Small Holder</td>
<td>4145</td>
<td>1115988</td>
<td>2844</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>6949</td>
<td>1666911</td>
<td>8951</td>
</tr>
</tbody>
</table>
### चिया नियांत तथा आयात विवरण

<table>
<thead>
<tr>
<th>आयुर्विक्षणांना</th>
<th>मिठाव</th>
<th>आयात</th>
<th>परिसंपादन म. स. ह.</th>
<th>मुख्य म. स. ह.</th>
<th>परिसंपादन म. स. ह.</th>
<th>मुख्य म. स. ह.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2051/02</td>
<td>92.2</td>
<td>-</td>
<td>92.2</td>
<td>92.2</td>
<td>92.2</td>
<td>92.2</td>
</tr>
<tr>
<td>2052/03</td>
<td>93.9</td>
<td>-</td>
<td>93.9</td>
<td>93.9</td>
<td>93.9</td>
<td>93.9</td>
</tr>
<tr>
<td>053/04</td>
<td>91.5</td>
<td>22.6</td>
<td>22.6</td>
<td>22.6</td>
<td>91.5</td>
<td>91.5</td>
</tr>
<tr>
<td>054/05</td>
<td>94.6</td>
<td>11.44</td>
<td>11.44</td>
<td>11.44</td>
<td>94.6</td>
<td>94.6</td>
</tr>
<tr>
<td>055/06</td>
<td>93.2</td>
<td>30.031</td>
<td>30.031</td>
<td>30.031</td>
<td>93.2</td>
<td>93.2</td>
</tr>
<tr>
<td>056/07</td>
<td>91.6</td>
<td>27.52</td>
<td>27.52</td>
<td>27.52</td>
<td>91.6</td>
<td>91.6</td>
</tr>
<tr>
<td>057/08</td>
<td>69.5</td>
<td>23.028</td>
<td>23.028</td>
<td>23.028</td>
<td>69.5</td>
<td>69.5</td>
</tr>
<tr>
<td>058/09</td>
<td>92.6</td>
<td>27.67</td>
<td>27.67</td>
<td>27.67</td>
<td>92.6</td>
<td>92.6</td>
</tr>
<tr>
<td>059/010</td>
<td>92.42</td>
<td>10.822</td>
<td>10.822</td>
<td>10.822</td>
<td>92.42</td>
<td>92.42</td>
</tr>
<tr>
<td>060/011</td>
<td>93.16</td>
<td>13.8971</td>
<td>13.8971</td>
<td>13.8971</td>
<td>93.16</td>
<td>93.16</td>
</tr>
</tbody>
</table>

### कफी नियांत तथा आयात विवरण

<table>
<thead>
<tr>
<th>आयुर्विक्षणांना</th>
<th>मिठाव</th>
<th>आयात</th>
<th>परिसंपादन म. स. ह.</th>
<th>मुख्य म. स. ह.</th>
<th>परिसंपादन म. स. ह.</th>
<th>मुख्य म. स. ह.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2051/02</td>
<td>96.60</td>
<td>168.945</td>
<td>168.945</td>
<td>168.945</td>
<td>96.60</td>
<td>96.60</td>
</tr>
<tr>
<td>2052/03</td>
<td>93.10</td>
<td>63.913</td>
<td>63.913</td>
<td>63.913</td>
<td>93.10</td>
<td>93.10</td>
</tr>
<tr>
<td>053/04</td>
<td>93.9</td>
<td>60.2299</td>
<td>60.2299</td>
<td>60.2299</td>
<td>93.9</td>
<td>93.9</td>
</tr>
<tr>
<td>054/05</td>
<td>2000</td>
<td>31.80</td>
<td>31.80</td>
<td>31.80</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>055/06</td>
<td>93.30</td>
<td>63.490</td>
<td>63.490</td>
<td>63.490</td>
<td>93.30</td>
<td>93.30</td>
</tr>
<tr>
<td>057/08</td>
<td>93.07</td>
<td>63.9115</td>
<td>63.9115</td>
<td>63.9115</td>
<td>93.07</td>
<td>93.07</td>
</tr>
<tr>
<td>058/09</td>
<td>91.92</td>
<td>24.2270</td>
<td>24.2270</td>
<td>24.2270</td>
<td>91.92</td>
<td>91.92</td>
</tr>
<tr>
<td>059/010</td>
<td>92.31</td>
<td>22.0728</td>
<td>22.0728</td>
<td>22.0728</td>
<td>92.31</td>
<td>92.31</td>
</tr>
<tr>
<td>060/011</td>
<td>94.95</td>
<td>19.6270</td>
<td>19.6270</td>
<td>19.6270</td>
<td>94.95</td>
<td>94.95</td>
</tr>
<tr>
<td>061/012</td>
<td>91.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>91.00</td>
<td>91.00</td>
</tr>
<tr>
<td>Sn.</td>
<td>District</td>
<td>Total Area Ha</td>
<td>Productive Area Ha</td>
<td>Dry Cherry Prod Mt</td>
<td>Productivity (MTha)</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>----------------</td>
<td>---------------</td>
<td>--------------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Jhapa</td>
<td>12</td>
<td>7.8</td>
<td>6.00</td>
<td>0.67</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Jumla</td>
<td>27</td>
<td>1.6</td>
<td>10.7</td>
<td>0.67</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Udayapur</td>
<td>2</td>
<td>1.25</td>
<td>1</td>
<td>0.8</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Sankhuwaswaiya</td>
<td>40</td>
<td>9</td>
<td>4.5</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Lalitpur</td>
<td>40</td>
<td>27</td>
<td>23.5</td>
<td>0.57</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>SinghuPatipok</td>
<td>30</td>
<td>10</td>
<td>6.5</td>
<td>0.66</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Kabrepanchok</td>
<td>110</td>
<td>15</td>
<td>11.25</td>
<td>0.75</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Nuwakot</td>
<td>28</td>
<td>18</td>
<td>14.4</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Dhading</td>
<td>13</td>
<td>6</td>
<td>5.4</td>
<td>0.67</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Makawanpur</td>
<td>10</td>
<td>3</td>
<td>2</td>
<td>0.67</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Palpa</td>
<td>174</td>
<td>30</td>
<td>24</td>
<td>0.8</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Galmi</td>
<td>87</td>
<td>50</td>
<td>50.4</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Arghakhachhi</td>
<td>23</td>
<td>10</td>
<td>7.7</td>
<td>0.33</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Syangja</td>
<td>170</td>
<td>40</td>
<td>32</td>
<td>0.8</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Kaski</td>
<td>40</td>
<td>15</td>
<td>9</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>Parbat</td>
<td>25</td>
<td>15</td>
<td>7.5</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Lantung</td>
<td>49</td>
<td>10</td>
<td>10</td>
<td>0.8</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Tanahu</td>
<td>46</td>
<td>9</td>
<td>7.2</td>
<td>0.8</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Gokha</td>
<td>87</td>
<td>7.5</td>
<td>6.25</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>Sakunga</td>
<td>25</td>
<td>10</td>
<td>8</td>
<td>0.8</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>Movdgi</td>
<td>1</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>Others Districts</td>
<td>11</td>
<td>5.5</td>
<td>3.85</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1076</td>
<td>307.16</td>
<td>246.79</td>
<td>0.75 (Ave)</td>
<td></td>
</tr>
</tbody>
</table>

Source by:
1. Nepal Coffee Producers Association
2. National Tea & Coffee Development Board
3. District Cooperative Association
4. District Agricultural Development Office
5. Coffee & Tea Development Branch, DOA
Tea Plantation and Production Statistics by zone in Nepal (F/Y 2061-62)

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Zone</th>
<th>Garden Area (ha)</th>
<th>Garden Production (Kg)</th>
<th>Small Farmers Area (ha)</th>
<th>Small Farmers Production (Kg)</th>
<th>No.</th>
<th>Total Area (ha)</th>
<th>Total Production (Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mechi</td>
<td>7671</td>
<td>7641445</td>
<td>6399</td>
<td>4687432</td>
<td>5609</td>
<td>14071</td>
<td>12328878</td>
</tr>
<tr>
<td>2.</td>
<td>Koshi</td>
<td>405</td>
<td>709418</td>
<td>535</td>
<td>125324</td>
<td>1020</td>
<td>940</td>
<td>234742</td>
</tr>
<tr>
<td>3.</td>
<td>Bagmati</td>
<td>150</td>
<td>35000</td>
<td></td>
<td></td>
<td>150</td>
<td>35000</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Others</td>
<td>624</td>
<td>46000</td>
<td>55</td>
<td>3431</td>
<td>225</td>
<td>739</td>
<td>7431</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>8911</td>
<td>7789863</td>
<td>6985</td>
<td>4816188</td>
<td>6854</td>
<td>15900</td>
<td>12566051</td>
</tr>
</tbody>
</table>

Tea Industry Forum ।

गिरिया सेवन, सहज जीवन ।
<table>
<thead>
<tr>
<th>सं.</th>
<th>तालाबका का क्रम</th>
<th>तालाबका मात्रा (हेक्टेल)</th>
<th>क्षेत्रफल (हेक्टर)</th>
<th>उत्पादन (किलोग्राम)</th>
<th>मूल्य (रुपये)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>साग</td>
<td>1200</td>
<td>120</td>
<td>120</td>
<td>1200</td>
</tr>
<tr>
<td>2</td>
<td>गोर</td>
<td>2000</td>
<td>200</td>
<td>200</td>
<td>2000</td>
</tr>
<tr>
<td>3</td>
<td>रात</td>
<td>1300</td>
<td>130</td>
<td>130</td>
<td>1300</td>
</tr>
<tr>
<td>4</td>
<td>गोर</td>
<td>2200</td>
<td>220</td>
<td>220</td>
<td>2200</td>
</tr>
<tr>
<td>5</td>
<td>गोर</td>
<td>2000</td>
<td>200</td>
<td>200</td>
<td>2000</td>
</tr>
<tr>
<td>6</td>
<td>गोर</td>
<td>2100</td>
<td>210</td>
<td>210</td>
<td>2100</td>
</tr>
<tr>
<td>7</td>
<td>गोर</td>
<td>2200</td>
<td>220</td>
<td>220</td>
<td>2200</td>
</tr>
<tr>
<td>No.</td>
<td>व्यापारी</td>
<td>नाम</td>
<td>व्यापार</td>
<td>लोकसाह</td>
<td>खेती</td>
</tr>
<tr>
<td>-----</td>
<td>----------</td>
<td>-----</td>
<td>---------</td>
<td>----------</td>
<td>-------</td>
</tr>
<tr>
<td>1</td>
<td>नाम्बर 1</td>
<td>नाम 1</td>
<td>व्यापार 1</td>
<td>लोकसाह 1</td>
<td>खेती 1</td>
</tr>
<tr>
<td>2</td>
<td>नाम्बर 2</td>
<td>नाम 2</td>
<td>व्यापार 2</td>
<td>लोकसाह 2</td>
<td>खेती 2</td>
</tr>
</tbody>
</table>

*अनुवादित:*

अनुवादित र सांगकेत हुन भने ।

अनुवादक:

नै नै नै नै नै

एका ओ रुटिनरी, २०७९
<table>
<thead>
<tr>
<th>क्र. नं.</th>
<th>योग्यता संख्या</th>
<th>प्रमुख विद्यालय का नाम</th>
<th>विद्यालय का नाम</th>
<th>विद्यालय का नाम</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
</tr>
<tr>
<td>2.</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
</tr>
<tr>
<td>3.</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
</tr>
<tr>
<td>4.</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
</tr>
<tr>
<td>5.</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
</tr>
<tr>
<td>6.</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
</tr>
<tr>
<td>7.</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
</tr>
<tr>
<td>8.</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
<td>राष्ट्रीय बिबिसी तथा कर्म के बिबिसी उच्चस्तरीय कार्यालय (राष्ट्रीय)</td>
</tr>
</tbody>
</table>

**चित्रा / कार्मी रोपी आदि बांटिया।**
1. साना विभाग सहायक सचिव न.भ. भारत घाटक भारत
2. हिमालय विभाग सहायक उपसचिव न.भ. बाबू राम कृष्ण बाबू
3. महान कार्य अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
4. पाहाड़िया सूचना मंत्री, अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
5. तालाब विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
6. अधिकारी समूह अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
7. विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
8. विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
9. विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
10. विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक

इन्हें निजी के पास विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक

विभाग सहायक संस्था

1. साना विभाग सहायक सचिव न.भ. भारत घाटक भारत
2. हिमालय विभाग सहायक उपसचिव न.भ. बाबू राम कृष्ण बाबू
3. महान कार्य अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
4. पाहाड़िया सूचना मंत्री, अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
5. तालाब विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
6. अधिकारी समूह अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
7. विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
8. विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
9. विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
10. विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक

इन्हें निजी के पास विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक

विभाग सहायक संस्था

1. साना विभाग सहायक सचिव न.भ. भारत घाटक भारत
2. हिमालय विभाग सहायक उपसचिव न.भ. बाबू राम कृष्ण बाबू
3. महान कार्य अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
4. पाहाड़िया सूचना मंत्री, अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
5. तालाब विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
6. अधिकारी समूह अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
7. विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
8. विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
9. विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
10. विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक

इन्हें निजी के पास विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक

विभाग सहायक संस्था

1. साना विभाग सहायक सचिव न.भ. भारत घाटक भारत
2. हिमालय विभाग सहायक उपसचिव न.भ. बाबू राम कृष्ण बाबू
3. महान कार्य अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
4. पाहाड़िया सूचना मंत्री, अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
5. तालाब विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
6. अधिकारी समूह अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
7. विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
8. विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
9. विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
10. विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक

इन्हें निजी के पास विभाग अधिकारी न.भ. प्रायुक्त पूर्वांग व्यवस्थापक
<table>
<thead>
<tr>
<th>सू.</th>
<th>नागरिकों का नाम</th>
<th>सम्पत्ति प्राधिकृत, इलाका</th>
</tr>
</thead>
<tbody>
<tr>
<td>१</td>
<td>भी जिला सहकारी सम, बुवै</td>
<td>भी हरदू गौड़, तम्पाड़, गुल्मी</td>
</tr>
<tr>
<td>२</td>
<td>भी मलाद महत्त्वपूर्ण सहकारी सम., टैली</td>
<td>भी निपुष्टाद लोकसभा, टैली-२, बांसको</td>
</tr>
<tr>
<td>३</td>
<td>भी उच्च पाहिट कपोल उत्पादक सहकारी सम., टैली</td>
<td>भी टुकलमसार इलाका, गियों-१, तालिएरूर</td>
</tr>
<tr>
<td>४</td>
<td>भी प्रोटेस्ट बनान तथा एकीकृत बृंह सहकारी सम., टैली</td>
<td>भी लेखनीय सभ्य, पुलिलिकाज नगर, टैली-१, सिकाटा</td>
</tr>
<tr>
<td>५</td>
<td>भी महाकाली मुख्य कपोल उत्पादक सहकारी सम., टैली</td>
<td>भी धम्मध इलाका, बियाडवाड़ा-२, पुलिलिकाज</td>
</tr>
<tr>
<td>६</td>
<td>भी अभिनव संगठन कपोल उत्पादक सहकारी सम., टैली</td>
<td>भी भूय कहाँ है, द्वारित-१, पुलिलिकाज</td>
</tr>
</tbody>
</table>

नोट - भववाहद कपोल प्रभावक बनाने विभिन्न उपकरण
प्रश्नोत्तर शब्दों की रूपरेखा नहीं है।
<table>
<thead>
<tr>
<th>क्र.स.</th>
<th>क्रमांको नाम</th>
<th>मुख्य व्यावसायिक नाम</th>
<th>कीमत नतीजा नाम</th>
<th>जनवारी</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>नामकारक दा प्रथमतित इकाइयों मै.</td>
<td>भी राजस्थानी मित्र, कार्यालय, भारत</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>के-डी एक्सप्रेस</td>
<td>एक्सप्रेस कार्यालय, पारित भवन</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>नेपाल पारितित हेमिज्जी मै.</td>
<td>नेपाल पारितित बांक, नेपाल सहकारी</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>राजस्थान रेस्वर्ड मै.</td>
<td>राजस्थान रेस्वर्ड कार्यालय, कालकट</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>मेक्जविल दा प्रथम बैंक</td>
<td>मेक्जविल बैंक, मेक्जविल</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>सहकारी न्यायालय एक्सप्रेस मै.</td>
<td>सहकारी न्यायालय, सहकारी न्यायालय</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>मेक्जविल एक्सप्रेस मै.</td>
<td>मेक्जविल एक्सप्रेस कार्यालय, मेक्जविल</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>बैंक एक्सप्रेस कार्यालय</td>
<td>बैंक एक्सप्रेस कार्यालय, बैंक एक्सप्रेस कार्यालय</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>नामकारक दा प्रथम बैंक</td>
<td>नामकारक बैंक, पारित भवन</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>मेक्जविल एक्सप्रेस मै.</td>
<td>मेक्जविल एक्सप्रेस कार्यालय, मेक्जविल</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>मेक्जविल एक्सप्रेस मै.</td>
<td>मेक्जविल एक्सप्रेस कार्यालय, मेक्जविल</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>बैंक एक्सप्रेस कार्यालय</td>
<td>बैंक एक्सप्रेस कार्यालय, बैंक एक्सप्रेस कार्यालय</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>मेक्जविल एक्सप्रेस मै.</td>
<td>मेक्जविल एक्सप्रेस कार्यालय, मेक्जविल</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>मेक्जविल एक्सप्रेस मै.</td>
<td>मेक्जविल एक्सप्रेस कार्यालय, मेक्जविल</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>मेक्जविल एक्सप्रेस मै.</td>
<td>मेक्जविल एक्सप्रेस कार्यालय, मेक्जविल</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>मेक्जविल एक्सप्रेस मै.</td>
<td>मेक्जविल एक्सप्रेस कार्यालय, मेक्जविल</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>मेक्जविल एक्सप्रेस मै.</td>
<td>मेक्जविल एक्सप्रेस कार्यालय, मेक्जविल</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>मेक्जविल एक्सप्रेस मै.</td>
<td>मेक्जविल एक्सप्रेस कार्यालय, मेक्जविल</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>मेक्जविल एक्सप्रेस मै.</td>
<td>मेक्जविल एक्सप्रेस कार्यालय, मेक्जविल</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>मेक्जविल एक्सप्रेस मै.</td>
<td>मेक्जविल एक्सप्रेस कार्यालय, मेक्जविल</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Himalayan Highland Specialties

Coffee with the Himalayan Fragrances

Naturally nourished bydefault ORGANIC and shade grown COFFEE from the HIGHLANDS of the ranges of Himalayan Mountains produce the rich aroma and the Himalayan Fragrance that......
A symbol of Quality From The Top Of the World

National Tea & Coffee Development Board
Kathmandu, Nepal