



APPROPRIATE TECHNOLOGY INDIA (AT INDIA)
“Conservation through Enterprise”



Annual Report-2018-19

**HO-Mandir Marg Guptkashi, PO-Guptkashi,
District-Rudraprayag-246439, Uttarakhand, India
Tel: 91-1364-264221 & 267355
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EXECUTIVE SUMMARY

Appropriate Technology India (AT India), an organization focused to making a socio-economic impact in the lives of the residents, was started in 1993 with dual objectives of conservation and enterprisedevelopment. During its illustrious journey of over 25 years in Uttarakhand it has reached to significant numbers of the households in the remotest mountain villages of the Himalayan state of Uttarakhand. Along with its twostrategical partner organizations viz. DevBhumi Natural Producers Co.Ltd. (DNPPCL) and Ushamath Mahila Mahasangh Ltd. (UMM), AT India has been



relentlessly offering innovative options of livelihood for the local communities with the purpose of moving them from subsistence to commercially viable livelihood activities.

DNPPCL is a producers company, owned in the current form by more than 8500 of its shareholders, offering critical marketing services that includes collection, storage, procurement, processing, value addition, packaging, labeling, branding, promotion and distribution etc. to the producers operating in the livelihood sectors.

UMM is an apex federation of SHGs and Valley Level Associations (VLA) acting as a community owned Micro-Finance Institute (MFI). UMM has been formed and nurtured with the objectives to build access of the under privileged communities over financial services in the remotest locations of the Himalayan state of Uttarakhand, operating with the clear mandate of providing affordable, convenient and timely financial services that includes micro-credit (small size loans), insurance, training and capacity building and linkage development for saving services with the Banks.

The strategic partnership of the triad has evolved keeping into account the specific development needs of the Himalayan state of Uttarakhand, where the communities not only require the extension services of development schemes but also strong institutional arrangements for marketing and financial services, essential for the sustainability of the development program. AT India, UMM and DNPPCL thus work towards achieving the goal of increasing the households income and reducing drudgery of women in agriculture, ensuring the conservation of local bio-diversity to promote development.

AT India, together with DNPPCL and UMM has developed a range of novel livelihood activities enabling steady returns in terms of income to nearly 18909 households by involving them in varieties of livelihood activities. Thus over the years of working in Uttarakhand what started as a biodiversity conservation program in 1993, with the mandate to develop an enterprise based model for

conservation, has evolved into a vibrant livelihood diversification and skills development program, still remaining true to its original ideal of biodiversity conservation. The involvement of forest dwelling communities in enterprises under its program exemplifies AT India's vision of economic security for local forest-dependent community through conservation.

Today AT India has been acknowledged to be at the forefront of innovation in development strategies, both in the context of livelihood development and conservation, supplementing each other, in the Himalayan state of Uttarakhand. The programs or activities of AT India can broadly be organized under conservation and livelihood as follows:

- **Livelihood activities impacting income and thereby conservation:** Sericulture, Dairy, Beekeeping / organic honey production, organic spices value chains and agribusiness.
- **Activities directly impacting conservation:** control of invasive weeds, watershed management and forestry program

An intervention once introduced becomes sustainable due to its linkage with DNPPCL and UMM. AT India has introduced the approach of Value Chain Analysis (VCA) and Business Development Services (BDS) at the micro-level for promoting livelihood. The VCA encompasses full range of activities and services required to bring a product or service from its conception to its end use, including the final markets into which a product or service is sold, locally, regionally, nationally or globally and beyond by identifying constraints that are blocking sales and investment. The VCA is complimented by the BDS by providing a systematic approach for increasing access of large numbers of enterprises to sustainable services that will help them overcome those constraints that have been identified in VCA. Together they form the core for enterprise development that AT India uses.

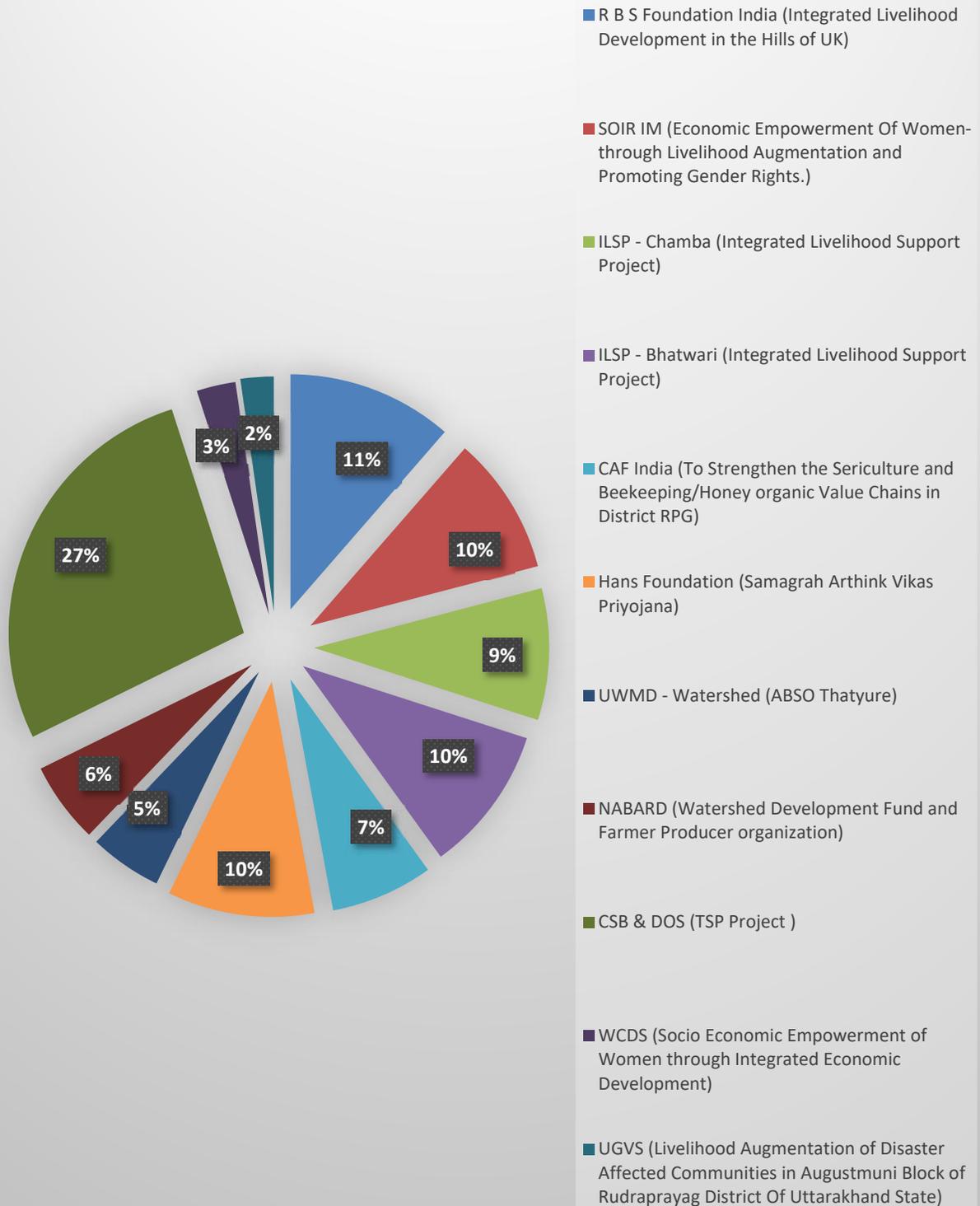
AT India thus concentrates on developmental and capacity buildings of entrepreneurs, mostly women, and once they reach a level of commercial production they become shareholders in DNPPCL which facilitates all commercial activities from organizing economies of scale in production, processing, product development, and marketing.

During the financial year 2018-19 AT India has actively worked for the cause of development with reputed partners like Uttarakhand Gramya Vikash Samiti (UGVS), Govt. Of Uttarakhand; Swedish Organization for Individual Relief (SOIR-IM); Project Silk Board (CSB), GOI; Directorate of Sericulture (DOS), Govt. of Uttarakhand; Royal Bank of Scotland (RBSFI); NABARD; Uttarakhand Women and Child Development Society (UWCDS); Integrated Livelihood Support Project (ILSP); Charity Aid Foundation (CAF) and Oracle successfully executing various livelihood projects worth Rs. 455.36 Lakhs.

AT India's outreach at a glance-2018-19

1. Total Districts:	6
2. Villages-	1026
3. Development Blocks:	26
4. Valleys / Clusters:	59
5. Total Households being assisted:	21302
6. Women stakeholders:	18909
7. Male stakeholders:	2393
8. SC/ ST stakeholders:	2384

Projects handled during the F.Y 2018 – 2019



SECTION 1

APPROPRIATE TECHNOLOGY INDIA

(AT India)

A: Livelihood Programs: 2018-19

1. SERICULTURE SUB-SECTOR – OAK, ERIAN MULBERRY SILK

One of the flagship program of AT India ‘Oak tasar silk cultivation’ in Uttarakhand state which reflects organisation’s synergistic approach of forest conservation through enterprise development has been continuously providing sustainable livelihood to the local communities. Started way back in 1995 as a strategy to conserve the old stand oak forest in Uttarakhand; has come a long way to become the single largest producer of oak cocoons in the country with a record harvest over 40 lakhoak tasar cocoons in the year 2003-04.

Based on the experiences gained in the oak tasar silk sectors, AT Indiadiversified its operations into the Eri and mulberry silk sector also, to cover the complete silk sector’s value chain. Considerable work has thus been done inmulberry, Eri and Oak tasar silk sectors in Uttarakhand state, by way of building the capacity of the stakeholders on wide range of issues in order to enable them to operate across the different stages of the value chain, with a view to enhance silk production while at the same time maintain sustainable harvests from the oak forests.

Today the silk sector has become one of the recognized livelihood options for the participating households.

➤ **Silk worm rearing and cocoon production (Oak, Eri and Mulberry)**



Mulberry rearing in progress



Preponed Oak tasar rearing

Availability of disease free larvae (DFLs) continues to be a major constrain to the Oak tasar sector. Due to the concerted efforts of intensive monitoring put in jointly by the CSB, ODS Uttarakhand and AT India a total of 1,35,902 oak tasar cocoons were produced during the year 2018-19 by involving 24 rearers.

AT India provided essential logistical support viz Eri rearing houses, equipment and capacity building inputs to a total of 22 farmers involved in rearing eri cocoon in 05 Development Blocks of the 3 mountain districts of Uttarakhand namely Tehri, Rudraprayag, and Chamoli. Training and capacity building programs were conducted on regular basis for the Eri rearers in order to enhance their capacity to cultivate quality cocoons on commercial basis. A total of 484 Kg of Eri cocoon was produced by them during the F.Y 2018-19.

The Mulberry silk cocoon production which started with 350 DFLs totalling to merely 42 Kg has grown up to a total production of 7000 DFLs by 206 farmers with a collective annual mulberry cocoon production of 167 Kg during 2018-19 in Pauri district.

Pre Cocoon Sector Infrastructure Developed by AT India supported by CSB and DOS, Uttarakhand			
Sl.	Particulars	Numbers	Locations
1	Oak Tasar Private Seed Grainage	9	Rudraprayag, Chamoli, Uttarkashi
2	Grainage at DOS, Govt. of Uttarakhand farm	1	Chandarapuri, Rudraprayag
3	Eri Rearing houses	80	Rudraprayag, Chamoli, Uttarkashi, Tehri
4	Mulberry Silk worm rearing Chawaki Rearing Centre (CRC)	1	Devalkhet, Jaiharikhal, Pauri
5	Mulberry silk worm rearing houses	206	Jaiharikhal, Rikhnikhal and Duggada Block in Dist. Pauri

➤ **Spinners capacity buildings-Oak and Eri Silk Yarn production**

Regular trainings were conducted for a groups of 155 women who are involved in the production of hand spun silk yarn, on order basis placed on them by DevBhumi Natural Products Producers Co. Ltd (DNPPCL). The silk yarn production is spread over 38 villages in the 2 districts of Rudraprayag and Pauri. Women trained in the centres undertake silk yarn production from their homes. Technical supervision and quality control checks are conducted by the technical staff of AT India and DNPPCL. A unique approach for decentralized production of silk yarn has thus been developed which includes cocoon distributions, yarn collection, quality control, procurement and payment to weavers.

➤ Weaving: Silk Fabric Production:



AT India with the support of DNPPCL has trained a group of 35 weavers, mostly women, to operate the handlooms and weave superior quality of silk fabric under the active supervision of 6 Master Weavers,



whohave painstakinglytrained these weavers and developed their skills to weave fine silk fabric / products to produce different products in intricate designs. The weavers thus weave and process fine quality of silk products such as shawls, stoles, mufflers, saris and silk fabric against orders collected and placed by DNPPCL every month. DNPPCL has been mobilizing the order from different buyers and support the weavers in pricing, packaging,product

development, designing, dying, finishing and marketing. They have collectively weaved 17077 Meters of fabric during the F.Y. 2018-19 an overview of post cocoon sector as under:

Overview of the post cocoon sector		
SL.	Particulars	Achievement/ Production
1.	Districts (Nos.)	2
2.	Blocks (Nos.)	6
3.	Valleys (Nos.)	10
4.	Villages (Nos.)	38
5.	Spinners Involved (Nos.)	155
6.	Dyers (Nos.)	03
7.	Weavers (Nos.)	35
8.	Weaving Centres (Nos.)	06
9.	Fabric / Product Development (Meters)	17077
9.1	Shawls (Nos.)	1329
9.2	Stoles (Nos.)	1059
9.3	Mufflers (Nos.)	298
9.4	Cape (Nos.)	5692
9.5	Scarf (Nos.)	805
9.6	Tharu	56
9.7	Coution	126
9.8	Fabric (Meters)	827.1

➤ **Marketing of Silk Products:**

The marketing of silk products is being handled by DNPPCL under the brand name of “DevBhumi”. The silk products from Uttarakhand have become quite popular and over the period have established a unique identity in the market. DNPPCL conducts promotional activities by participating in leading national and international exhibitions and has developed strong relationship with different buyers across the country and in Europe. The total turnover of silk sector recorded of order of INR 1.54 Cr. per annum.

➤ **Beneficiaries Empowerment training:**

The capacity building across the silk value chain have been conducted in collaboration with CSB, DOS Uttarakhand at the field level to expose stakeholders technically to handle real life situations across the different stages of the value chain. The members are trained in rearing of oak, eri and mulberry silk worms, nursery development, plantation, silk yarn production, silk products weaving, dyeing, design development and quality control.

➤ **Impacts of the program**

The value chain based approach of the program has impacted the whole value chain and helped in biomass regeneration, cocoon production, yarn production, weaving, product and design development, finishing, dyeing, value addition, promotion, marketing and providing employment to participating households by building their knowledge and skill base. It strategically focussed on the economic, ecological and cultural aspects of the mountain terrain by raising significant numbers of Q. Serrata, mulberry and castor plantation.

The plantation of oak species Q. serrata and mulberry have added value to the local ecology by strengthening the forest base and involving local communities in natural resource management, institutional and enterprises development thus generating sustainable livelihood.

2. ORGANIC SPICES SUBSECTOR

• Overview

Influenced by a careful value chain assessment study commissioned in 2008-09 indicating that local production of certain organic spices could compete in the end markets AT India promoted cultivation of turmeric, ginger, garlic and large cardamom in 5 districts viz. Rudraprayag, Chamoli, Tehri, Uttarkashi and Pauri primarily because it is less labor intensive, quite remunerative to cultivators, allows for decentralized processing, and reduces the problems faced by field crops being destroyed by wild animals.



The major thrust has been to build the capacity of the producers in pre- and post-harvest management. Careful selection of seed varieties, seed treatment, improved cultivation practices, minor irrigation technology, composting and biological inputs to reduce the risk in organic spices value chains are some of the inputs provided to the producers in the form of village level trainings and demonstrations.

One of the major challenges faced by the hill villages was supply of quality seeds. An innovative approach was hence introduced by selecting a few women for the production of spices seed, who now undertake seed productions on commercial basis and act as the spices seed Business Service Providers (BSPs).

Organic cultivation practices was another major thrust being introduced with the spice producer groups. The organic certification for the spiceproducers are being extended in collaboration with Uttarakhand State Organic Certification Agency (USOCA) for which a comprehensive documentation system has been developed at the producer level, valley level and organization level.

AT India and DNPPCL together have established processing facilities at 5 different places in Rudraprayag, Tehri, Chamoli, Uttarkashi and Pauri.

The storage facilities have been improved in order to ensure that the spices do not get infected with mould and fungus.

Quality control measures have been explained to the producer groups which include cleaning, sorting, semi processing, grading and hygienical storage.

The procurement of the produced spices is being handled by DNPPCL as it is determinedly striving to develop the markets for the spices being produced by the women groups in the mountain region.

• Impact

Spices cultivation has allowed reopening cultivation of fields that had previously been abandon due to disturbance caused by wild animal in agriculture crops. As of today about 6017 women are actively cultivation of organic spices on commercial level. The total land under the cultivation in all 511 villages recorded 127 hectare. The total production of assorted of organic spices is reported 377.36 MT per annum. The income that comes from the cultivation for the producers estimated in the range of Rs. 1000-Rs. 8000 per annum.

The spices seed production has been taken by 47 womenon 4.7 hectare land.

AT India together withDNPPCL and UMM has organized numerous awareness camps, technical trainings and exposure visits which has augmented spice producer groups (PGs) managerial, marketing and distribution capacities.

Spices cultivation is reportedly found to be labour and drudgery reducing, income generating and saving the crops from wild life intrusion and hence accepted as a major livelihood activity by the villagers.

Major highlights of the organic spice cultivation during the F.Y 2018-19						
Sr.	Spices	No. of villages covered	No. of producers	Cultivated area (ha)	Production (MT)	Average annual income (Rs.)
1.	Turmeric	452	3333	106.	178.40	4000- 6000
2.	Ginger	319	2193	43. 86	124.71	3500- 6000
3.	Garlic	376	2409	67.45	59.84	5000- 8000
4.	Large Cardamom	98	138	4.15	0.068	2000-3000
5.	Chillies	287	2147	64.41	11.55	2000-3000
6.	Coriander	231	986	19.72	2.82	1000-2000

3. BUSINESS DEVELOPMENT SERVICES- DAIRY SUBSECTOR

- Overview

AT India organized women into dairy producers groups (PGs) and helped them take up improved dairy / animal husbandry practices, technology. Extensive village level trainings, demonstrations and outside exposures to see the best practices adopted by the dairy producers was carried out. Herd upgradation through artificial insemination (AI), natural breeding, fodder (tree and grass) development, cattle feeds, stall feeding technology, animal health, vaccinations and composting etc. are major activities that the dairy producers have adopted for enhancing productivity and production in the sector. Demonstrations of dairy inputs and technology followed by development of business services at micro level, by selecting and training the local youths in commercial extensions of input and output services both at village and market level has strategically helped the sector to grow consistently.



AT India facilitated the entire process and encouraged and supported the Business Service Providers (BSPs) to operate as standalone enterprises and provide commercial services to the dairy producers / PGs. The BSPs have been developed at different locations to provide varieties of services related to dairy development such as herd upgradation, cattle feeds, composting, milk collections etc. The BSPs have been established to service the needs of this nascent industry.

All through biodiversity and reducing work pressures of the women was kept in the fore by way of extensive fodder plantation and training and supporting composting.

- **Impact**

Commercialization of dairy has had an important positive impact on the regions biodiversity due to reduction of low productivity cattle that were allowed for open grazing in forests and pastures lands which caused the destruction of saplings thus posed the challenge in regeneration. Oak leaves were used as the only green fodder in the winter months which posed the threat to existing old forest. Fodder cultivation, stall feeding and commercial approach in dairy has reduced the frequency of the visit to the forests made by the village women for collection of fodder.

The impact of dairy development program is also visible in terms of the increased income of the producers, collectors and milk processing unit owner and evidently dairy has become one of the significant income generating activities.

The Business Development Services (BDS) based approach has shown impacts in terms of increase in fresh milk production, collection and distribution and also reduced work load for women attributed to innovative approach such as fodder development, cattle feed, stall feeding and composting technology. Asan estimation women in the program village, reportedly are able to save at least 10% of their time due to participation in dairy activities.

Today almost 61 % dairy producers are utilizing the services; such as the breed improvement, cattle feed, composting technology and stall feeding activities; through purchase from the trained team of BSPs.

The impact of the input and output services as briefly described above has been positive as is indicated by the volume of milk being generated and sold by more than 80%women in an organized manner. As of now approximately 64284 litreof milk is being sold daily through 115 dairy collectors. Thecorresponding increase in the income of producers during last three years has gone up from Rs. 1845.00 to Rs. 2500.00 per month.

Overview of the Dairy program in 6 districts.			
Sl.	Particulars	Unit	Quantity
1	Village covered	Nos.	513
2	Producer groups formed	Nos.	473
3	Producer linked to dairy activities	Nos.	6642
4	Producers moved to commercial level	Nos.	3139
5	Business Service Providers (BSP) developed	Nos.	193
6	Area covered under fodder plantation	Ha.	24.5
7	Producer using composting technology	Nos.	905
8	Animal heard up gradation centres developed (AI & Natural Breeding)	Nos.	95
9	Progeny developed through conducting Artificial Insemination (AI) and Natural Breeding (NB)	Nos.	5770
10	Milk production per day	Litre	64284
11	Milk marketing per day	Litre	34797.5
12	Average income of producers per month	Rs.	2500.00

BEE KEEPING / ORGANIC HONEY PRODUCTION SUBSECTOR

• Overview

AT India pioneered in moving beekeeping sector from subsistence to the business level and has been the first to get organic certification for the Himalayan beekeepers. The organic honey production has been adopted as a mean of livelihood by approximately 5322 households in 478 mountain villages of 6 districts Rudraprayag, Chamoli, Tehri, Uttarkashi, Dehradun and Pauri of the Garhwal region in the state of Uttarakhand, out of which 2422 have moved to the commercial production stage.

The beekeeping team of AT India immensely encouraged women and developed the honey based enterprises by exposing them to the improved honey production practices. As a result more than 1756 women are engaged in collective honey production. The stakeholders are organized as honey producers groups (PGs) who receive technical, managerial, financial and marketing support from AT India, UMM and DNPPCL. The capacity building



training and exposure visit are being given to honey PGs in the area of seasonal management, swarm catching, preventing absconding, division of colonies, safe and hygienic extraction of honey.



Systematic and intensive field work being carried out by AT India augmented by the dedicated marketing support provided by DNPPCL and financial services support of UMM has moved significant number of men and women to adopt commercial bee keeping in the Himalayan villages in Uttarakhand. The sector generate an additional income of

approximately Rs. 8000.00 p.a. per annum for the honey producer through part time engagement in the activity.

- **Impact**

- Women’s Participation in honey productions.**



In the mountain villages of Uttarakhand women are equally participating in all the activities of the honey value chain right from production to harvesting and trading. They perform a specific role in beekeeping by maintaining the hives and colonies. Today due to extensive field extension they.

- Honey production and income**

There has been tremendous growth in honey production over the year. It is estimated that 35-38 MT honey is being produced collectively by 344 honey producers groups (PGs). While conserving the Himalayan bee *Indica* through development of bee colonies which currently are over 10000, honey production has created the impacts not only on the economic security of the participating households but also on the local bio-diversity due to pollination services rendered by the bees.

Major achievements of the beekeeping programme		
Particulars	Unit	Achievement
Villages covered	Nos.	478
Total Honey Producers	Nos.	5322
Commercial honey producers	Nos.	2422
Honey producers groups (PGs)	Nos.	344
Women beekeepers / Honey producers	Nos.	1756
No Bee colonies	Nos.	10117
Honey Production	MT	35.6
Procurement by DNPPCL	MT	20.5

B: Conservation Programs: 2018 - 19

1. NATURAL DYES PRODUCTIONS FROM INVASIVE WEEDS-EUPATORIUM

• Overview

To address the problem of Eupatorium, a tenacious and invasive weed spreading rapidly in mountain region and destroying local bio-diversity including agriculture in the hilly area, At India developed a program ensuring environment conservation and livelihood development by finding utilization aspects of invasive weed Eupatorium (Adenophorum) with the participation of local communities.

To sustain interest and involve the local community in the eliminating or uprooting process it was necessary to find some commercial utilization of the weed providing them a livelihood opportunity, the weed has hence been converted into natural dyes by local community as part of elimination strategy.

The technology applied in manufacturing natural dyes from eupatorium is low cost and simple to use. The weeds are collected from the plots, identified for monitoring and are processed in Community Facility Centre (CFC), established in Akashkamini valley with state of art facilities for manufacturing the natural dyes. Eupatorium leaves are a good source of natural dyes and all types of silk yarns such as Oak Tasar, Eri, Mulberry, Wool and cotton can be easily dyed. Different colours are extracted from eupatorium weeds. The dye powder, made of eupatorium leaves gives beautiful shades, with different mordents, ranging from light green to golden yellow.

In view of commercialization and biodiversity conservation the techniques of uprooting and coppice management were applied in parallel; uprooting has been effective in curbing rapid growth of weed and regular coppice management has helped control the spread of eupatorium while ensuring availability of foliage for production of natural dyes.

The community facility centre (CFC) operates with a monthly production capacity of more than 1.5 quintal of dye powder. The natural dyes being produced, is used for dyeing different types of silks, woollen and cotton yarn for manufacturing the fabric and products under the aegis of DNPPCL. The natural coloured silk and wool blended products have a very good acceptance due to its quality and uniqueness.

• Impact

The initiative taken by AT India to address weed menace through its management and utilization for economic purpose has resulted in the production of natural dyes from the local weeds and has shown impact at two levels:

- i. generating employment opportunities and
- ii. conserving the environment from the menace of Eupatorium by reducing / eliminating its rapid growth.

70 percent of the weed's germination was effectively checked by uprooting.

SECTION 2: Strategic Partners

Annual Report F.Y. 2018-19

1. DEVBHUMI NATURAL PRODUCTS PRODUCER Co. Ltd. (DNPPCL)

DevBhumi Natural Product Producer Company Ltd (DNPPCL) was registered in 2007 as a producer company under part IX A of Companies Registration Act, 1956.

The Company is today owned by nearly 8500 rural producers mainly women from Chamoli, Rudraprayag, Pauri, Tehri, Uttarkashi and Dehradun districts of Uttarakhand as its shareholders.

The board of DNPPCL is democratically drawn from producers / shareholders and is guided by an advisory group comprising professional from private, public and development sectors. with its processing operations spread across all the 5 districts, sales cum admin office in Dehradun and head office located in Guptkashi DNPPCL supports its stakeholders, involved in economic activities, by providing critical marketing support viz. collection, procurement, processing, labelling, packaging, promotion, placement, branding and distributions etc.

DNPPCL was the winner of the best micro-enterprise award instituted by Citi Bank Foundation in 2012.

• Key highlights of DNPPCL's operations:

- i. **Annual turnover for the F.Y 2018-19** :INR 314 lakhs and has paid around 95 lakhs to it's producers for production and procurement across various sectors.
- ii. **Products :**
 - a. Oak Tasar silk fabric and silk products viz. shawls, stoles, mufflers and Sarees, capes and cushion covers,
 - b. Certified organic honey;
 - c. Certified organic spices - turmeric, ginger, chilli and coriander, Rajma,
 - d. Fresh milk and milk products (Ghee).
- iii. **Membership :**The Company is registered with reputed regulatory bodies namely Central Silk Board (V+CSB) under Silk Mark, AIACA for Craft Mark, FSSAI, USOCA Organic Certification , ISO - 9001.
- iv. **Permissions and license :**The firm has obtained all Trade Licenses, PAN, VAT Nos. and a USOCA Organic Certification.
- v. **Production capacity :**
 - a. **Sericulture sector** :5 master weavers, 16 spinners and 25 handlooms can weave 25000 meters of silk fabric annually.
 - b. **Honey sector** :DNPPCL owns a certified organic honey processing plant with per batch capacity of 1.2 ton and can process upto 115 ton Honey annually.
 - c. **Organic Spices sector** :Registered with the Spice board of India for marketing of organic turmeric, ginger and kidney beans (Rajma) DNPPCL has been certified organic. The cultivation is spread across all the five states and taken up by the members of DNPPCL.

Milk sector : The Company procures and markets around 80-100 litre of fresh milk per day from the Kedar valley of Rudraprayag districts.

1. USHAMATH MAHILA SELF RELIANT COOPERATIVE MAHASANGH Ltd.(UMM)

UshamathMahilaMahasangh Ltd. (UMM) is a federation of women SHGs, established and registered under the Uttarakhand Self-Reliant Cooperative Society Act 2003 and works with the objectives of catering the unmet financial needs of the poor women living in the remotest areas of the Uttarakhand state. Structured as a community based microfinance institution UMM's mandate is to focus on solutions that help improving the socio economic status of marginalized and low-income households in the hill villages of the state of Uttarakhand.

UMM has pioneered in introducing affordable, convenient and financial services at the door steps for women residing in the hills, especially those who are beyond reach of the formal financial services. UMM, a community owned micro-finance institute (MFI), since its inception, relentlessly works towards catering to the financial needs of poor women residing in the mountain villages and has ensured financial inclusion for approximately 10446 women.

To be able to meet the small loans and insurance needs of its client SHGs, UMM partners with different reputed organizations such as National Bank for Agriculture and Rural Development (NABARD), State Bank of India (SBI), District Cooperative Bank (DCB) Chamoli, Small Industrial Development Bank of India (SIDBI), Rastriya MahilaKosh (RMK) and most recently a Bangalore based Organization called "Rang De".

In the F.Y 2018-19a loan fund of the order of Rs. 1.32 crore has been mobilised from different organizations, banks and financial institutes and has disbursed Rs.1.52 crores amongst 635 members of the SHGs.

UMM has institutionalized its microfinance program through Self Help Groups (SHGs) which are organized into Valley / Cluster Level Associations (VLAs), a model which is commonly used by most MFIs in the country. UMM today works with 36 valley Level Associations (VLAs). As a growing microfinance institution UMM has made reasonable progress in the microfinance sector in terms of its increased outreach and portfolio. It caters to 1127 SHGs having 10446 women members, with a cumulative saving of Rs. 3.45 Crore.

Vision: Elimination of poverty in hilly areas by providing financial facilities to the poor who are neglected by the traditional financial system.

Mission: To provide convenient banking facilities to its members and other needy non-members individuals.

Objective: The central objective of UMM is to bring social, economic, cultural and political development of the poor who are mainly neglected by traditional financial system.

Area of Operation: 568 villages of 6 mountain districts viz. Rudraprayag, Chamoli, Tehri, Uttarkashi, Dehradun and Pauri Garhwal.

Loan Clients: UMM has a loan client base of 6520 women SHGs members. The repeat loan clients of UMM at present number 693

Total Loan disbursement: Since the beginning of its operation UMM has disbursed an amount of Rs. 15.30 crores among 6520 clients. Through rigorous monitoring it has ensured a 93% repayment rate.

Key Highlights of UMM Micro-finance Program-2018-19	
No. of SHGs	1127
No. of SHG members	10446
No. of Villages	568
Total Savings of SHGs(in INR)	3.45 Crore
Average monthly savings per member (in INR)	100
Average savings per month per SHG (in INR)	926
Amount of UMM Loan outstanding (in INR)	105.00 Lakhs
Rate of Interest charged by UMM	10 - 12% (Flat)
Repayment Rate	93%

Financial Report F.Y. 2018-19

H. S. Ratra & Co.
Chartered Accountants

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Audit Report for Financial Year 2018-2019

Board of Directors,
Appropriate Technology India
B-106, Yamuna Apartment,
Alaknanda, New Delhi-110019

Sub : Submission of Statutory Audit Report for the accounting year ended 31st March, 2019

Sir,

The accounts of Appropriate Technology India have been audited on the basis of record produced and information supplied (oral and written) by the office bearers of the society during course of our audit. The statement of accounts viz. Income & expenditure A/c. & the Balance sheet, for the aforesaid period have been duly examined and the observation and discrepancies so noticed on the transaction and affairs of the society have been mentioned in audit objection and general remarks.

Please find enclosed herewith the Statutory Audit Report for the accounting year 1st April, 2018 to 31st March, 2019 along with the following -

1. Statement of Income and expenditure Account for the year ending on 31st March 2019.
2. Statement of Receipt & Payment Account for the year ending on 31st March 2019.
3. Balance Sheet as on 31st March, 2019.

Thanking you,
For For M/s H. S. Ratra and Co.
Chartered Accountants
Firm Registration No.: 009227C

CA H S Ratra
Proprietor
Membership No.: 077134



H. S. Ratra & Co.
Chartered Accountants

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INDEPENDENT AUDITOR'S REPORT

**Board of Directors,
Appropriate Technology India
B-106, Yamuna Apartment,
Alaknanda, New Delhi-110019**

We have audited the accompanying financial statements of **Appropriate Technology India**, which comprise the Balance Sheet as at 31st March 2019 and the Statement of Profit and Loss / Income & Expenditure for the year ended, and a summary of significant accounting policies and other explanatory information incorporated in these financial statements of the Society along with its Branches audited by us for the period 1st April 2018 to 31st March 2019

Management's Responsibility for the Financial Statements

Management is responsible for the preparation of these financial statements in accordance with Maharashtra Co-operative Societies Act, 1960 & Rules there under. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with the applicable Standards by The Institute of Chartered Accountants of India and under the MCS Act. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.



H. S. Ratra & Co.
Chartered Accountants

65-A, Guru Road, Dehradun - 248001
Mob. : +91 9837003626
Ph. : (0135) 2763626, 2769926
E-mail : hsratra@gmail.com

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Society's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

6. In our opinion and to the best of our information and according to the explanations given to us, the said accounts together with the notes thereon give the information required as per the Maharashtra Co-operative Societies Act 1960 and the Maharashtra Co-operative Societies Rules 1961, and any other applicable Acts, and or circulars issued by the Registrar, in the manner so required for the society gives a true and fair view in conformity with the accounting principles generally accepted in India:

- (i) In the case of the Balance Sheet, of the state of affairs of the society as at 31st March 2019;
- (ii) In the case of the Statement of profit and loss / Income & Expenditure of the profit/loss for the year ended on that date; and



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Report on Other Legal and Regulatory Matters

The Balance Sheet and the Profit and Loss Account have been drawn up in accordance with the provisions of the Maharashtra State Co-operative Act.

We report that:

- (a) We have obtained all the information and explanations which, to the best of our knowledge and belief, were necessary for the purpose of our audit and have found them to be satisfactory.
- (b) The transactions of the Society, which have come to our notice, have been within the powers of the Society.
- (c) The returns received from the offices and branches of the Society have been found adequate for the purposes of our audit.

In our opinion, the Balance Sheet and Profit and Loss / Income & Expenditure Account comply with applicable Accounting Standards.

We further report that:

- (i) The Balance Sheet and Profit and Loss / Income & Expenditure Account dealt with by this report, are in agreement with the books of account and the returns.
- (ii) In our opinion, proper books of account as required by law have been kept by the Society so far as appears from our examination of these books.

Thanking you,

For M/s H. S. Ratra and Co.

Chartered Accountants

Firm Registration No.: 009227C



Proprietor

Membership No.: 077134

APPROPRIATE TECHNOLOGY INDIA

Registered Office: B-106, Yamuna Apartment, Alaknanda, New Delhi-110019

Head Office: Mandir Marg Guptkashi, Distt. Rudraprayag, Garhwal, Uttarakhand

Balance Sheet as at 31st March 2019

Liabilities	Schedule	As at 31st March 2019	As at 31st March 2018	Assets	Schedule	As at 31st March 2019	As at 31st March 2018
Capital Fund		30,563,646	30,563,646	Fixed Assets-	5	2,034,107	1,984,735
Reserves & Surplus	1	(3,305,422)	(6,841,185)	Investments	6	20,314,457	16,825,000
Unspent Grants in Projects	2	15,422,690	8,904,899	Overspent Grants Recoverable from Projects	2	761,938	587,082
Current Liabilities				Current Assets, Loans and Advances			
Sundry Creditors	3	468,049	130,000	Cash & Bank Balances	7	15,964,877	11,155,676
Expenses Payable & Provisions	4	1,488,710	2,865,458	Loans & Advances	8	5,330,139	4,959,976
				Security Deposits	9	232,155	110,349
Total		44,637,672	35,622,818	Total		44,637,672	35,622,818

For and on behalf of Board

As per our separate report as on even date

For M/s H. S. Ratra and Co.

Chartered Accountants

Firm Registration No.: 009227C


Dr. S. P. Singh

Bimal Kumar Saini

President

Executive Director

Date:

Place: Dehradun

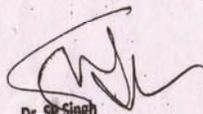


Membership No.: 077134

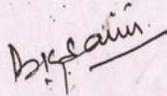
Appropriate Technology India
 Registered Office: B-106, Yamuna Apartment, Alaknanda, New Delhi-110019
 Head Office: Mandir Marg Guptkashi, Distt. Rudraprayag, Garhwal, Uttarakhand
Statement of Income and Expenditure for the year ended 31st March 2019

Expenditure	Year ended	Year ended	Income	Year ended	Year ended
	31st March	31st March		31st March	31st March
	2019	2018		2019	2018
To Staff Cost	1,719,029	2,950,649	By Indirect Exp Allocated in Projects (Baseline Survey)	942,888	400,300
To Gratuity Expenses	86,440	442,275	By Project Implementation Charges recovered	-	731,864
To Staff Welfare	50,423	125,822	By Interest on Income Tax Refund	-	13,219
To Staff Travel	10,007	7,533	By Interest in FDR's	188,024	54,111
To Bank Charges and Commission	80,848	5,788	By Interest received on Bank Account	39,402	12,968
To Travel Expenses(ED & Members)	186,984	-	By Interest Received on Sweep Account	-	31,134
To Depreciation	84,487	141,149	By Misc. Receipts	3,489,453	1,308,116
To Office Expenses	7,041	2,065	By Interest Received on Mutual Fund	2,537,210	1,822,006
To Rent and Electricity	7,699	76,000	By NABARD Donations	1,039,150	504,350
To Printing and Stationery	138,571	8,771	By UGVS Donation	986,058	2,629,110
To Telecommunication Expenses	172,350	371,654	By Amt recd for Training Exposure/Baseline Survey	-	-
To Vehicle Fuel and Repair	-	6,916	By JICA Donation	-	-
To Establishment Expenses (Rearing)	-	98,589	By Excess of Expenditure over Income	-	-
To Amount Written Off	-	1,019			
To Interest on TDS Expenses	56,640	106,201			
To Computer Maintenance	254,878	102,631			
To Audit Expenses	-	120,000			
To Retainership Expenses	1,624,061	1,924,521			
To NABARD Expenses	1,148,763	861,941			
To UGVS Expenses	27,501	-			
To Organic Certification Charges	17,000	-			
To CSR Project Expenses	13,700	-			
To Land Related Expenses	3,535,763	153,654			
To Excess of Income over Expenditure	-	-			
Total	9,722,185	7,507,178	Total	9,722,185	7,507,178

For and on behalf of Board


 Dr. SP Singh
 President
 Date:
 Place : Dehradun





Bimal Kumar Saini
 Executive Director

As per our separate report as on even date

For M/s H. S. Ratra and Co.
 Chartered Accountants
 Firm Registration No. 009227C



Appropriate Technology India

Registered Office: B-106, Yamuna Apartment, Alaknanda, New Delhi-110019
Head Office: Mandir Marg Guptkashi, Distt. Rudraprayag, Garhwal, Uttarakhand
Schedules forming for the year ended 31st March 2019

Annexure No. 1- Reserves and Surplus

Particulars	31.03.2019	31.03.2018
Opening Balance	(6,841,185)	(6,994,839)
Less: Excess of Expenditure over Income	-	-
Add: Excess of Income over Expenditure	3,535,763	153,654
TOTAL	(3,305,422)	(6,841,185)

Annexure No. 3 - Sundry Creditors

Particulars	31.03.2019	31.03.2018
Ankit Daman & Co.	26,568	-
Charu Printers	5,600	-
Dhan Laxmi SHG	248	-
DMA & ASSOCIATES	75,600	-
D N P P C L (Other)	108,041	-
Deepak Electronics (RBS)	(20,000)	-
Hotal Sai Dham	7,600	-
Jaspal Singh Lakhmandal	2,000	-
Madan Singh Agrwal Guptkashi(Parking)	10,000	-
Manvedra Shav	(24,000)	-
M/s YESTEAM SOLUTION PRIVATE LIMITED	3,642	-
Om Prakash Singh Kaintura	18,750	-
Pramod Kumar (RBS)	(10,000)	-
Ram Singh (RBS)	(10,000)	-
Sun Info Systems	62,550	-
Vardan Motors	2,450	-
H S Ratra and Co.	209,000	130,000
TOTAL	468,049	130,000

Annexure No. 4 - Expenses Payable & Provision

Particulars	31.03.2019	31.03.2018
Expenses Payable Construction House	-	1,494,751
EPF Payable (Employer Contribution Charges Payable)	116,679	137,706
EPF Payable (Employee Contribution Charges Payable)	104,076	121,656
Expenses Payable	-	1,659
Saheb Anand & Co.	-	(80,000)
Vodafone UMM	(55,947)	(30,561)
Office Rent Payable	22,100	-
Salary Payable	9,350	58,754
Statutory Audit Fees Payable	130,000	21,000
TDS Payable	47,402	25,448
Gratuity Payable	1,115,050	1,115,050
TOTAL	1,488,710	2,865,458

H S RATRA & CO.

APPROPRIATE TECHNOLOGY INDIA
Registered Office: B-106, Yamuna Apartment, Alaknanda, New Delhi-110019
Head Office: Mandir Marg Guptkashi, Distt. Rudraprayag, Garhwal, Uttarakhand
Annexure "2" Details of Overspent & Underspent Grant

Name of the Project	Opening Balance of Unspent Grant	Opening Balance of Overspent Grant	Grant Recd During the Year	Interest Earned	Project Expenditure	Overspent Grant transferred to ATI	Underspent Grant Transferred to ATI	Closing Balance of Overspent Grant	Closing Balance of Unspent Grant
Bank of Scotland (RBS) Livelihood	6,997,838	-	-	173,026	5,189,603	-	-	-	1,981,261
Bank of Scotland (RBS) Mulbery	76,851	-	-	-	-	-	-	-	76,851
S	854,931	-	-	-	901,150	-	-	46,219	-
S (OLD)	-	7,689	-	-	-	-	-	7,689	-
S 2019-21 (Pokri)	-	-	1,218,060	-	-	-	-	-	1,218,060
ajyal Mulbery Development Cluster (CSB/DOS)	-	122,654	12,440,800	-	380,523	-	-	-	11,937,623
ated Livelihood Support Project, Bhatwari	42,219	-	4,590,819	-	4,633,038	-	-	-	-
ated Livelihood Support Project, Chamba	570,020	-	4,118,636	-	4,688,656	-	-	-	-
huvneshwari Mahila Ashram- Pauri	-	131,159	-	-	-	-	-	131,159	-
huvneshwari Mahila Ashram- Chamoli	-	33,221	-	-	-	-	-	33,221	-
ish Organization for Individual relief (SOIR-IM)	220,137	-	4,335,854	-	4,354,301	-	-	-	201,690
ans Foundation	142,903	-	4,596,166	14,524	4,746,388	-	-	-	7,205
	-	259,371	2,265,169	-	2,516,350	-	-	510,552	-
ty Aid Foundation (CAF)	-	32,988	3,206,080	-	3,206,190	-	-	33,098	-
ABARD Donations	-	-	-	-	-	-	-	-	-
GVS Donation	-	-	-	-	-	-	-	-	-
TOTAL	8,904,899	587,082	36,771,584	187,550	30,515,199			751,958	15,422,690



APPROPRIATE TECHNOLOGY INDIA
Registered Office: B-106, Yamuna Apartment, Alaknanda, New Delhi-110019
Head Office: Mandir Marg Guptkashi, Distt. Rudraprayag, Garhwal, Uttarakhand
Schedule-"5" Fixed Assets
For the period ended 31st March, 2019

No.	Particulars	WDV As On 31/03/2018	Additional/ (Sales)		Total Amount	Depreciation		WDV As On 31/03/2019
			Before 30/09/18	After 30/09/18		Rate	Total Amount	
1	Land	39,079.00			39,079.00	0.00%		39,079.00
	- Land At Village Pothe	587,100.00			587,100.00	0.00%		587,100.00
	- Land At Guptkashi	226,600.00			226,600.00	0.00%		226,600.00
	- Land At Village Sankri							
	Total	852,779.00			852,779.00			852,779.00
2	Building	829,700.00			829,700.00	10.00%	82,970.00	746,730.00
	- Building Office	829,700.00			829,700.00		82,970.00	746,730.00
	Total							
3	Furniture & Fixtures	1,185.00			1,185.00	10.00%	118.00	1,067.00
	- Almirah	66,550.00			66,550.00	10.00%	6,655.00	59,895.00
	- Other Furniture	38.00			38.00	0.00%		38.00
	- Project Assets							
	Total	67,773.00			67,773.00		6,773.00	61,000.00
4	Plant & Machinery	2,290.00			2,290.00	15.00%	343.00	1,947.00
	- Mobile Phones	2,290.00			2,290.00		343.00	1,947.00
	Total							
5	Office Equipments	485.00			485.00	15.00%	72.00	413.00
	- Generator	12.00			12.00	0.00%		12.00
	- Project Assets							
	Total	497.00			497.00		72.00	425.00
6	Computer & Printer	3.00			3.00	40.00%	1.00	2.00
	- Laser Printer and Modem	136.00	136,360.00		136,496.00	40.00%	54,598.00	81,898.00
	- Laptop	31.00			31.00	0.00%		31.00
	- Project Assets							
	Total	170.00	136,360.00		136,530.00		54,599.00	81,931.00
7	Vehicle	21,407.00		100,000.00	121,407.00	15.00%	10,711.00	110,696.00
	- Vehicle UK-07-AB-5157	137,862.00			137,862.00	15.00%	20,679.00	117,179.00
	- Vehicle UK-07-BP-5237 Bolero	7.00			7.00	0.00%		7.00
	- Project Assets	72,250.00			72,250.00	15.00%	10,837.00	61,413.00
	- Vehicle Scorpio			100,000.00	100,000.00			
	Total	231,526.00		100,000.00	331,526.00		42,227.00	289,295.00
Grand Total		1,984,735.00	136,360.00	100,000.00	2,221,095.00		186,984.00	2,034,107.00

TRA & P
D. Madan
7/2/19

Appropriate Technology India
Registered Office: B-106, Yamuna Apartment, Alaknanda, New Delhi-110019
Head Office: Mandir Marg Guptkashi, Distt. Rudraprayag, Garhwal, Uttarakhand
Schedules forming for the year ended 31st March 2019

Annexure No. 6 - Investment in Mutual Funds

Particulars	31.03.2019	31.03.2018
Franklin India Flexi Cap - G	1,050,000	1,050,000
Franklin India Prima plus	2,000,000	2,000,000
HDFC Growth G	4,539,457	1,050,000
Prudential ICICI Dynamic - G	1,050,000	1,050,000
Reliance Growth - G	1,050,000	1,050,000
SBI Magnum Balanced Fund - G	525,000	525,000
HDFC MIP Long Term G	1,050,000	1,050,000
HDFC Mid Cap Opprtunities fund	2,000,000	2,000,000
ICICI Prudential Income Focused Bluechip Equity Growth	2,000,000	2,000,000
Birla Sunlife Frontline Equity Fund	2,000,000	2,000,000
Relaince Equity Opportunities Fund	2,000,000	2,000,000
FT India Balanced Fund - G	1,050,000	1,050,000
	20,214,457	16,825,000

Annexure No. 7 Cash and Bank Balances

Particulars	31.03.2019	31.03.2018
SBI Ukhimath (A/c No. 11786525148)	1,061,841	10,001
ICICI Bank Dehradun (A/c No.016401015887)	1,575,103	7,175,890
SBI (A/c No. 10901525942)	17,198	(162,419)
SBI (A/c No. 10901525953)	198,536	1,886,219
S B I A/c No. 34962549884	(501,253)	(693,130)
HDFC (A/c No. 2251110000104)	12,020	12,020
SBI A/c No. 34175996473	1,201,074	9,794
SBI A/c No.34635432868	38,269	14,200
SBI A/c No. 34635435031	135,544	(105,020)
SBI A/c No. 37077504552	55,531	713,357
SBI Dehradun (A/c No. 30176254327)	20,749	15,431
Sweep A/c No. 38350686496	52,000	-
Sweep A/c No. 38364580983	65,000	-
Sweep A/c No. 31954292601	604,000	-
Sweep A/c No. 37750918794	1,012,000	-
Sweep A/c No.37832767151	21,000	-
Sweep A/c No. 37832836933	183,000	-
Sweep A/c No. 37846280276	48,000	-
Sweep A/c No.38350461278	10,037,000	-
Sweep A/c No. 35872462317	-	13,894
Sweep A/c No. 37173686973	-	5,000
Sweep A/c No. 37238736763	-	17,000
Sweep A/c No. 37314240321	-	1,000
Sweep A/c No. 37323122180	-	89,028
Sweep A/c No. 37572159748	-	133,000
Sweep A/c No. 37576370585	-	16,000
Sweep A/c No. 37585118195	-	105,000
Sweep A/c No. 37600060384	-	105,000
Sweep A/c No. 37604607267	-	97,673
Sweep A/c No. 37613232897	-	486,000
Sweep A/c No. 37196127666	-	8,256
Sweep A/c No. 37604761525	-	235,000



Annexure No. 8 Loans and Advances

Particulars	31.08.2019	31.08.2018
Devbhumi Natural Products Producers Company Ltd	4,036,000	4,156,000
TDS AY 2018-19	431,117	431,117
TDS AY 2016-17	-	-
TDS AY 2017-18	372,859	372,859
TDS AY 2019-2020	359,948	-
RBS Receivable	174,489	-
Staff Imprest Details as per list Annexure - 8.1	(44,274)	-
Total	5,329,139	4,959,976

Annexure No. 8.1 - Details of Imprest Accounts

Particulars	31.08.2019
Imp Anita Bhandari	(2,344.00)
Imp Archana Nautiyal Hans	(1,870.00)
Imp Ashish Tomar ABSO	(3,130.00)
Imp Atul Jain	(2,621.00)
Imp Birendra Singh Chauhan	(3,514.00)
Imp Deepali Singhal	(200.00)
Imp Dharmedu Shukla	6,640.00
Imp Dinesh Chauhan(Lakhamandal)	(4,079.00)
Imp Harihar Prasad Thyur	1,194.00
Imp Heera Singh Bisht ABSO	672.00
Imp Kripa Ram Bhatt	6,601.00
Imp Kuldeep Singh Bajwal (Driver)	1,000.00
Imp Kunwar Singh Rawat Huddu	(4,265.00)
Imp.Mahipal Singh Rawat	(250.00)
Imp Malti Haldar	(12,060.00)
Imp Mandakini	(28,266.00)
Imp Sandeep Raturi ABSO	(2,240.00)
Imp Sandeep Vishakarma	(1,890.00)
Imp Subodh Rana	(300.00)
Imp Suman Singh Panwar ABSO	(1,375.00)
Imp Suresh Kapruwan	7,450.00
Imp Udaypal Singh Negi Beekeeping	183.00
Imp Vinod Dobhal	390.00
Total	(44,274.00)

Annexure No. 9 Security Deposits

Particulars	31.08.2019	31.08.2018
Security Telephone	6,199	6,199
Security Deposits (Sales Tax)	225,956	104,150
Security Deposits (Bal Vikas)	232,155	110,349
Total	464,310	220,698

