

Balliguda Forest Division

presented by

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- Tree Translocation of 1000 trees in Balliguda Forest Division
- The project was **conceived at DFO Office Balliguda.**
- Uniqueness is **34 diff sps** shifted, first large scale project by **any govt org,**
- **High risk** as the success was not sure
- Date 12 Feb 19 to 5th July 19, and maintenance work upto June 2020. (Initially **planned for 3 months** March April and May)
- Successfully translocated all the trees, with varied survival rate with different sps., **survival rate of different sps were taken into account,**

Tangible benefits

- The trees which were **otherwise would have been cut** are now saved.
- The habitat of innumerable **micro and macro-organisms are saved**, which, otherwise would have been destroyed.
- The **documentation and analysis** of the work was done with photos, videos, recording of the data etc. for the future reference.
- The **mistakes were identified and rectified**, this will definitely help future endeavors

Intangible benefits

- The cost/value of the saved **tree is invaluable** in terms of the ecosystem services for the mankind and also for the wildlife.
- There is **paradigm shift in the thinking process** of the other departments which are involved in the developmental works.
- IFS and SFS trainee officers had **exposure visit**. Also by the forest staff from other divisions and from **other training centers** visited for study purpose.
- The possibility of the translocation is being considered by the user agencies and different departments, which is a positive sign.
- The **division staff are trained now**, who are exposed and involved in the work there by upgrading the skill of the staff.
- The experience of the translocation **work was shared** with the MoEF, New delhi, and soon we will be having official guidelines or SOP for the tree translocation work.

Replication potential

- **High replication potential** across the fields.
- We can **strike a balance** between conservation and the Development (has the potential to consider it as a possibility)
- This will increase the **image of the organizations** across the society.
- Tree translocation for **34 different species** is known now. This learning would be beneficial and a would act as a guide for the other executing agencies.

- The Balliguda division will be releasing the document with reference to the **experience and the learning.**
- As the mistakes have been identified and rectified, now the rate of **success will be very high in future endeavors**

Challenges faced

- Before the work

Reference materials or the literatures for the different species were not available

The cost norm were not available

Survival rate of the many species

Getting the required approvals

- During the work

Availability of the skilled labors, Machinaries, Insect and pest attack in few trees espl stem borers etc

- After the work

COVID-19 , Skilled labors and the vehicles for the watering and maitainance work

Illicit felling of the trees by the local people

Water logging due to heavy rains and cyclones, decay of the roots

Major and Important learning

- The rootball preparation, **shallow depth**, Mechanical support
- The percentage of **the root mass retained** for about **10%** or more. With **2-3 metres spacing**
- The pitting work at least **30-45 days in advance**
- The damage to the roots due to **shaking** The trees to be given **sharp cut to root**
- The **soil testing** before site finalization
- Proper drainage, termite and borers
- The maintenance work for min **five years**

Species wise survival percentage after 1 year

| Sl No | Scientific Name | Name of Species | Nos of Trees | Dead Trees | Live Trees | Survival percentage |
|-------|--------------------------------|-----------------------|--------------|------------|------------|---------------------|
| 1 | <i>Ficus racemosa</i> | Dimiri | 1 | 0 | 1 | 100 |
| 2 | <i>Bombax ceiba</i> | Simili | 1 | 0 | 1 | 100 |
| 3 | <i>Albizia odoratissima</i> | Tentera | 1 | 0 | 1 | 100 |
| 4 | <i>Soamania saman</i> | Kakopoi/Bada chakunda | 17 | 1 | 16 | 94 |
| 5 | <i>Anogeissus acuminata</i> | Phasi | 16 | 1 | 15 | 94 |
| 6 | <i>Alstonia Scholaris</i> | Chatian | 71 | 4 | 67 | 94 |
| 7 | <i>Ficus bengalensis</i> | Banyan | 11 | 1 | 10 | 91 |
| 8 | <i>Peltophorum ferrugineum</i> | Radhachuda | 18 | 7 | 11 | 61 |
| 9 | <i>Shorea robusta</i> | Sal | 802 | 320 | 482 | 60 |
| 10 | <i>Syzygium cumini</i> | Jamu | 2 | 1 | 1 | 50 |
| 11 | <i>Lannea coromandelica</i> | Mai | 2 | 1 | 1 | 50 |
| 12 | <i>Pterocarpus marsupium</i> | Piasal | 6 | 3 | 3 | 50 |
| 13 | <i>Terminalia tomentosa</i> | Sahaja | 8 | 6 | 2 | 25 |
| 14 | <i>Terminalia belerica</i> | Bahada | 1 | 1 | 0 | 0 |
| 15 | <i>Semicarpus anacardium</i> | Bhalia | 1 | 1 | 0 | 0 |
| 16 | <i>Buchnanian lanzan</i> | Char | 3 | 3 | 0 | 0 |

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|-------|--------------------------------|-----------------|--------------|------------|------------|---------------------|
| 17 | <i>Dalbergia latifolia</i> | Dhubi | 1 | 1 | 0 | 0 |
| 18 | <i>Anogeissus latifolia</i> | Dhau | 1 | 1 | 0 | 0 |
| 19 | <i>Pongamia pinnata</i> | Karanja | 2 | 2 | 0 | 0 |
| 20 | <i>Bridelia retusa</i> | Kasi | 1 | 1 | 0 | 0 |
| 21 | <i>Diospyros melanoxylon</i> | Kendu | 2 | 2 | 0 | 0 |
| 22 | <i>Madhuca indica</i> | Mahula | 5 | 5 | 0 | 0 |
| 23 | <i>Mangifera indica</i> | Mango | 4 | 4 | 0 | 0 |
| 24 | <i>Swietenia mahogoni</i> | Mahoghany | 2 | 2 | 0 | 0 |
| 25 | <i>Azadirachta indica</i> | Neem | 4 | 4 | 0 | 0 |
| 26 | <i>Artocarpus integrifolia</i> | Panasa | 1 | 1 | 0 | 0 |
| 27 | <i>Grevillea robusta</i> | Silver Oak | 1 | 1 | 0 | 0 |
| 28 | <i>Tectona grandis</i> | Teak | 1 | 1 | 0 | 0 |
| 29 | <i>Tamarindus indica</i> | Tentuli | 1 | 1 | 0 | 0 |
| 30 | <i>Sesbania grandiflora</i> | Agasti | 2 | 2 | 0 | 0 |
| 31 | <i>Lendo(Odia)</i> | Lendo | 1 | 1 | 0 | 0 |
| 32 | <i>Dalbergia sisoo</i> | Sisoo | 3 | 3 | 0 | 0 |
| 33 | <i>Acacia auriculiformis</i> | Acacia | 6 | 6 | 0 | 0 |
| 34 | <i>Cassia siamea</i> | Chakunda | 1 | 1 | 0 | 0 |
| | | Total | 1000 | 389 | 611 | 61 |