



## **2012 Coveme Forestry Report**

Dec,2012

### 1. Introduction

In year of 2012, total planting area of MTP are 417.93 hectares (6269 Mus), the planting plot si located in Liujiazi Town, Kulun Qi, Inner Mongolia, and at the edge of Taminchagan desert.

As one of a important donator for MTP, we planted 1.8 hectares (27 Mus) for Coveme according to the contract signed in 2012. The tree species were pines and poplars with total number of 2000 trees. We applied intercrop on the land with ratio of 1:1.

#### 林地位置示意图



### 2. The planting and Growing

#### - Poplar

We planted forest with 1-year old hybrid poplar seedlings, the density is 1.5m\*6m. Local farmers planted trees after land preparation with machine. Poplar seedlings were cut at the height of 1 meter in order to reduce the damage to young seedlings caused by the hot dry wind in May. Sprouts appeared as early in May. And in July and August, poplar saplings with nice green leaves were swinging in gentle summer winds. It could be expected that after a few years, these poplars will grow tall and big, becoming strong wind-breaks.



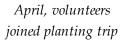




Meanwhile, local famers intercropped corns and watermelons in poplars and intercropped corns in pines.

### Some pictures of pine trees







At the end of April



Poplar sprouts



August, intercropped with watermelon

#### - Pine

We planted 3 years old *Pinus sylvestnis* seedlings with density of 1.5m\*6m. All trees were planted at the end of July with intercropped of corns and watermelons. As one of the recommended tree species which have received great success in nearby area, pine can live with cold and dryness, have rich root system and can reduce wind speed significantly. Compared to poplars, pines are slow-growing. The pine seedlings we planted this year are averagely 24 centimeters tall. Based on research, the first 4-5 years after planting is slow for pines to grow. But after 5 years, the growing speed will be faster and will keep for decades till maturity.

#### Some pictures of pine trees







Pine and corns



Growing pines



April, planted pine

## 3. Sample Survey

From Sep to Nov, 2012, with the support of local farmers, our Forest Manager Litao Sun and Forest Specialist Kyle Wang did the survey on all plots we planted in year of 2012. The ratio of sample survey is about 0.5% applied with random sample method. The number is sample plots are 198 with 5299 trees.

The indicators of investigation include: survival rate, high of tree, ground of diameter. The survival rate of trees planted refers to the percentage of surviving planting stock to the total planting stock after one year or







one growing season. Tree height refers to the distance or height from the base of the root to the top of the tree. Ground diameter (GD) refers to the diameter of tree trunk at ground level.

It was found out from the survey that, for poplars, the average survival rate is 63.29%, with average ground diameter of 1.40 cm, average DBH is 0.92 cm and average tree height of 1.50 m; for pines, the average survival rate is 79.58%, with average ground diameter of 0.72 cm and tree height of 0.24 m.

Coveme Forest (Poplars) has the average survival rate of 87%, average ground diameter of 1.30 cm and average tree height of 0.96 m; Coveme Forest (Pines) has the average survival rate of 92%, average ground diameter of 0.96 cm and tree height of 0.16 m.

Coveme Sample Survey Result			
	Survival rate	Ground diameter	Tree high
Poplar	87%	1.3 cm	0.96m
Pine	92%	0.96cm	0.16m







Local famers supported on the survey

## 4. Analysis, problem and solutions

The Coveme forest 2012 is growing well in general. The survival rate reached our expectation, and famers didn't plant high crops against our regulation. However, there are still some problems we observed through site-visits and investigation. Proper measures should be taken in the future to solve the problems discovered and make sure the trees will be taken better care of.

For example, in the poplar forest, we observed some damages or death caused by humans. After some investigation, we found out that it was because the farmers didn't strictly follow the rules of intercropping, leaving not enough space between the tree and crop. The practice of planting corns and watermelons damaged some trees. Some of them even died. This made the average survival rate in this particular plot lower than







average. Therefore, we will replant in the spring of 2013 and improve our communication with the farmers.

More site-visits and spot-checks are being planned to ensure such damage will not happen in the future.

### Pictures of plaques



Plaque in April 2012



Early June, 2012



Early May



August, 2012, intercropped with watermelon

