Analysis on Measures to Improve the Technical Level of Afforestation and Seedling Raising

Guodong Xiao, Hongyuan Ge*

Sidalong nature reserve of Gansu Qilian Mountain National Nature Reserve Administration Bureau, Qilianshan, Gansu, China

renj1985@126.com

*Corresponding author

Keywords: Afforestation and seedling raising, Technical level, Measures

Abstract: In recent years, with the continuous progress of social economy, forestry resources have been seriously damaged, and the proportion of domestic per capita green land is decreasing year by year. To improve this phenomenon, the state strengthens the construction of afforestation, and focuses more on the relevant afforestation and seedling work. This paper first analyzes the problems existing in the current afforestation and seedling work, and then discusses how to further improve the technical level of modern afforestation and seedling work.

1. Introduction

According to the investigation of the actual progress of China's forestry in recent years, the technical level of afforestation and seedling raising in China needs to be perfected. Through the analysis of the common technical problems in afforestation and seedling raising work, the relevant departments concluded that the main reasons are the lack of professional knowledge of technical personnel and regional environmental factors. To respond to the call of sustainable and healthy development of the country, forestry management personnel strengthened the progress of afforestation and seedling raising technical ability. Only by reasonably solving the problems in afforestation and seedling work, can we promote the long-term development of forestry industry.

2. Analysis on Common Problems in Afforestation and Seedling Raising

At present, the main problems in afforestation and seedling work are as follows.

2.1 Lack of Management Awareness of Afforestation and Seedling Work

In the actual afforestation and seedling management, many technical staff didn't correctly realize the significance of training management consciousness, leading to the low professional knowledge and technical level of some seedling personnel. There are also some technical personnel lacking scientific knowledge and professional and technical ability. It is easy to have problems in the cultivation of forest seedlings without normative, standardized technology as professional guidance, thus affecting the normal development of afforestation and seedling work.

2.2 Insufficient Attention to Land Rectification

In the afforestation and seedling work, each link directly affects the planting effect and quality, but now most of the forestry technical personnel do not focus much on the details of the seedling work, leading to a lot of technical problems in the seedling work. For example, in the process of land rectification, the key of afforestation and seedling work is to ensure that the soil planting conditions can meet the requirements of vegetation planting, and ensure that the soil has good permeability and drainage. In addition, after finishing the land rectification, the staff can operate the mechanical equipment more easily and quickly, greatly improving the work efficiency, reducing the difficulty of the relevant forestry personnel, ensuring the planting quality of trees, and effectively

DOI: 10.25236/iwass.2021.035

avoiding the possible mechanical equipment problems. To sum up, the land rectification before planting vegetation and seedlings can effectively reduce the incidence of mechanical accidents and planting difficulty, and improve the survival rate of seedlings. The relevant technical personnel must promote their correct understanding of land rectification [1].

2.3 Imperfect Management System

If the management system related to afforestation and seedling technology is not perfect and safe, it will produce a serious negative impact on the smooth progress of afforestation and seedling work, even hinder the innovation and reform of later afforestation and seedling technology, and affect the promotion and management effect of afforestation and seedling technology.

2.4 Lack of Later Stage Management Awareness

In the process of afforestation and seedling work, we should not only strengthen the early management and planting management of seedlings, but also strengthen the training of later stage management consciousness of seedlings. Due to the more complex management of seedlings in the later stage, it needs a lot of staff to put in a lot of energy, and needs a lot of technical management support. However, to reduce the management cost, some management departments ignore the later stage management of seedlings, bringing serious difficulties to the later afforestation and seedling work.

3. Measures to Promote the Technical Level of Afforestation and Seedling Raising

3.1 Optimize Relevant Management System

We should reasonably use modern technical means, strengthen the management of afforestation and seedling work. To improve the backward level of traditional afforestation and seedling technology and meet the needs of current social and economic development, relevant personnel must establish a complete set of perfect afforestation and seedling management system to provide significant technical management guarantee for the orderly progress of afforestation and seedling work. In addition, the government should increase the financial support for forestry, constantly update and replace the seedling equipment, and realize the modernization and information management of seedling technology. At the same time, we should employ professional technicians to guide the seedling technology, introduce international advanced seedling technology and mechanical equipment, carry out scientific management of afforestation and seedling work, and promote the healthy and stable progress of afforestation and seedling work [2].

3.2 Enhance the Professional and Technical Level of Technical Personnel

Forestry units should focus more on the relevant technical ability and professional knowledge of afforestation and seedling raising technicians, establish special training institutions, and regularly carry out professional technical knowledge and skill training for relevant technicians, so as to continuously promote their professional technical level. At the same time, we can establish reward and punishment system, enhance their awareness of afforestation and seedling work, mobilize their work enthusiasm, so as to promote the quality and quantity of afforestation and seedling work.

3.3 Improve the Supervision and Management of Afforestation and Seedling Work

Firstly, from the aspect of improving the technical level of afforestation and seedling, according to the current development direction of afforestation and seedling work, we should formulate the corresponding management regulations and build a perfect management system, combine with the relevant provisions, carry out detailed and rigorous supervision on afforestation and seedling work. Secondly, in the process of supervision of afforestation and seedling work, all departments should strengthen the cooperative relationship between themselves, employ high-quality and technical talents to participate in afforestation and seedling work, strengthen the training of relevant technical personnel and management personnel, and constantly enhance their comprehensive quality and professional and technical level. Finally, the preliminary design of afforestation and seedling should

be done well. Technical personnel should carry out field environmental investigation and data analysis on the actual planting site of afforestation and seedling, so as to provide effective data support for the orderly development of afforestation and seedling work in the later stage. In addition, advanced scientific and technological means can be used to improve the level of forestry economic development. The means can effectively reduce costs, improve the economic benefits of enterprises, and promote the reform and innovation of afforestation and seedling technology.

3.4 Enhance Afforestation Management Level

To improve the level of afforestation management, the main means of management are as follows. Firstly, we should strengthen the management of forest resources, correctly understand the significance of soil fertilization technology and pruning and shaping technology for forest resource management, and take scientific and reasonable prevention and control measures for forest diseases and pests. Secondly, we can focus more on directional cultivation and further improve the technical level and quality of afforestation. Thirdly, we should focus more on the development of under forest economy and constantly improve the management level of forestry resources. The rational use of science and technology can achieve the unity and coordinated progress of ecological benefits, social benefits and economic benefits of forestry resources, and produce a far-reaching significance for the promotion of the afforestation level and the sustainable and healthy development of forestry resources in China.

3.5 Improve the Utilization Rate of Seedling Seeds

The construction of seedling breeding bases is a significant basic guarantee to develop afforestation and seedling work. Based on the good protection of forest resources, we should realize the construction of improved seed base, promote the cultivation of seedling seed resources, optimize seed planting technology, continuously improve the collection and storage of seeds, and establish a perfect seed monitoring and management system, make full use of advanced science and technology to realize the mechanized management of the overall cultivation and planting of seeds, and further improve the utilization rate of seeds [3].

3.6 Promote Industrial Production of Seedlings

In the process of realizing the industrialization of seedling production, the relevant departments should constantly encourage the staff of some institutions or government cadres, scientific research personnel, private owners and nearby township residents or farmers to actively participate in the forest planting and construction. It is necessary to fully rely on the government's policies or the relevant laws and regulations formulated by the state, clarify its legal status, and combine with the relevant investment policies or fund utilization policies to give support to its relevant funds, so as to build a fair and just market competition environment for forestry operators. According to the current situation of seedling structure in various regions, state-owned, rural and individual management occupy one third of the position respectively. The analysis of market operation shows that the level of individual seedling technology is better, and with professional seedling technology as guidance and advanced science and technology as support, individual seedling technology will become the "main force" of domestic seedling technology.

3.7 Introduce International Advanced Seedling Equipment

The traditional seedling technology can't meet the requirements of the current forestry development. It is necessary to keep pace with the development of the times and constantly improve and update the seedling technology, so as to make the market economic competitiveness of forestry resources in an invincible position for a long time. The international advanced non-woven container can be introduced to cultivate seedlings. The non-woven container has the characteristics of strong decomposition, convenient and fast. It can effectively improve the quality of seedlings and reduce the damage to plants caused by frequent transplantation. In addition, technicians can also use rare earth method to cultivate seedlings, which can effectively improve the survival rate of seedlings and provide good survival conditions and nutrients for seedlings [4].

3.8 Scientifically and Rationally Use Modern Seedling Technology

To improve the technical level of afforestation and seedling not only means to improve the content of seedling technology, but also means that the management personnel of seedling technology should also enhance their overall quality and professional techniques, combine with reasonable training mechanism to strengthen their own management. Firstly, we can employ technical personnel with higher seedling qualification to each school for technical guidance of seedling work. Secondly, we can organize certain technical personnel training, and set up corresponding evaluation mechanism for regular or irregular qualification assessment, to ensure the continuous improvement of technical level, and the staff won't face the risk of being dismissed. Finally, we can actively mobilize the work enthusiasm of the supervision and management staff, hire professional seedling experts for guidance to promote the continuous promotion of seedling technology level of relevant technical personnel. In addition, we should focus on the scientific management of seedling, do a good job in fertilization, trimming and pest control of seedlings, and maintain the healthy growth of seedlings.

4. Conclusion

In short, with the continuous progress of science, technology and social economy, people pay more and more attention to the natural environment and ecological environment. Facing the serious problems of forest resources, people must focus more on afforestation and seedling raising. This paper discusses the measures from eight aspects, including promoting forestry technology level, improving the utilization rate of seeds, strengthening the supervision and management of afforestation and seedling and so on, hoping to promote the level of afforestation and seedling technology, realize the sustainable and healthy progress of forestry.

References

- [1] Wang Bo, Zhong Guoqing. Key Points of Modern Forestry Seedling Technology and Research on Afforestation Technology. Farm Affairs, no.06, pp.177-178, 2021.
- [2] Li Zhaofu. Analysis on Measures to Improve the Technical Level of Afforestation and Seedling Raising. Hubei Agricultural Mechanization, no.14, pp.29-30, 2020.
- [3] Wang Xiaoxi. Analysis on Measures to Improve the Technical Level of Afforestation and Seedling Raising. Southern Agriculture, vol.13, no.20, pp.73-74, 2019.
- [4] Wang Baomin. Study on Measures to Improve Afforestation and Seedling Raising. Flowers, no.16, pp.257, 2018.