From the ‘Greening Motherland’ Campaign to the ‘Ant Forest’ App: Tree-planting in China’s environmental politics

A historical reflection of China’s main mass tree-planting projects puts in evidence the increasingly key role of capital and market forces in rural China. The most recent one, the Ant Forest mobile phone App, is based on the idea of “green” consumerism and benefits some of the biggest retailer and technology companies in the country.

In July 2020, echoing president Xi Jinping’s “Beautiful China” policy (1), the recently amended Forestry Law officially sets March 12 as the National Tree-planting Day.

Already before this amendment, every year on this Day, stories of different levels of governments, including the highest leadership of the central government, participating in tree-planting activities, have always appeared at the forefront of news coverage in China. The history of China’s Tree-planting Day can be traced back to several decades ago, when the Nationalist Government set this date for mourning Sun Yat-sen, who was the first president of the Republic of China and who did much to promote tree-planting during his life.

The Tree-planting Day is an epitome of the environmental politics of contemporary China, in which planting trees at an industrial scale plays a fundamental part.

Since 1949, a series of large-scale forestation projects have been launched and directed by the Chinese government. These well-known forestation projects started in different time periods, with vastly different political and economic conditions, so each has a unique structure and agenda. The most recent one being the Ant Forest App – a programme for smart phones that allows consumers to take part in tree planting and/or conservation as they consume online, – which has gained substantial social influence in quite a short period of time.

The trajectory of the tree-planting projects in China after 1949 shows that the driving force of forestation in China has been increasingly changing from political power to market incentives.

‘Greening Motherland’

In 1956, to support industrial development and reduce the frequency of floods, the Chinese Communist Party launched the ‘Greening Motherland’ Campaign (GMC) (2). Within the two years that followed, 80 per cent of the citizens in China had participated in different kinds of tree-planting activities, and 16 million hectares of trees had been planted (3). GMC was initiated and directed by a few political elites from the Chinese Communist Party, such as Mao Tse-Tung and Zhou Enlai. It had a very strictly top-down nature. To ordinary people, environmental awareness was not yet cultivated. The worship of political leaders and ideological zeal was the reason for them to be mobilized in this massive campaign (4). Nonetheless, the campaign failed since it contained huge uncertainty led by relying too much on the personal will of the political leaders.

>From 1958 onwards, a mind-set focused on furthering “progress” and “development” within

governmental officials started to prevail. The Great Leap Forward Campaign (GLFC) was launched for a period of five years with the aim to rebuild the country from an agrarian economy into an industrialized communist society. During this period, the government urged rapid industrialization of China and made unrealistic production plans, which resulted in massive environmental degradation. For example, to increase the production of steel, a large number of backyard furnaces were built, and people would melt whatever steel object they could find. For powering these furnaces, immeasurable areas of forest were destroyed. Ironically, the same political power that promoted the GMC resulted this time in the most significant man-made environmental devastation in modern Chinese history (5).

Three-North Shelterbelt Forestation Project (TNSFP)

The Three-North Shelterbelt Project (also known as the Green Great Wall) covers vast land areas in the north, north-west and north-east parts of China. These places have been threatened by desertification and droughts for many years. Between the 1960s and 1970s, 29.67 million hectares of land, including arable land and meadow, deteriorated significantly, even turning some into what is known as the Gobi desert (6). In 1978, the Chinese central government launched the TNSFP as the biggest forestation project in the world, in order to hold back the expansion of the desert. It has a very ambitious aim: to raise the total tree coverage area of northern China with almost 38 million hectares, which means to increase the tree coverage rate from 5% to 14.95% by the end of 2050 (7).

The planned duration of this project is 73 years, from 1978 until 2050, divided into eight stages. During the second stage (after 1985), in order to motivate more people to participate, the notion of ‘eco-economic forests’ (8) started to be promoted. This resulted in the introduction of economically valuable plants, such as fruit trees and herbs as well as more advanced cultivation techniques.

Meanwhile, the government started an economic reform to develop the private-sector economy, which supposedly benefited the people planting trees on the land they contracted from local governments or village collectives (9). These reforms underline the increasing importance of the market economy in forestation projects in China. This was also reflected in the decreasing proportion of unpaid work done by the general public, which contributed in different phases of the TNSFP.

In rural China, a system called ‘two-work’ (*liang gong*) had long been in operation. It requires the physically able rural residents to undertake certain amount of compulsory workload every year in projects like tree-planting, flood prevention, road construction, school facilities restoration and irrigation facilities construction (10). Before this system was completely abolished in 2006, it played a large part in the TNSFP. Between 1978 and 2000 (Stage 1 to Stage 4), the total investment for the TNSFP amounted to 71,582.72 million RMB (more than US10 billion dollars). The value discounted from the unpaid work contributed by ordinary people accounted for 65.57%, while the investments from the central government, local governments and other public sectors accounted only for 13.84%, 14.83% and 5.75%, respectively (11). However, with the deepening of the economic reforms in China, the TNSFP had to offer payments to be attractive in the labour market. Accordingly, the amount of unpaid work in the total investment decreased drastically, from 96.14%, 90.79%, 75.61% to 14.64%, in the four stages respectively (12). In this sense, the TNSFP was driven increasingly by market forces and less by political power.

Ant Forest (13): A Market-based Forestation Project

In August 2016, Ant Financial - the largest Chinese financial technology company - launched a mobile gaming programme called Ant Forest. This programme allows consumers to participate in tree planting and conservation as they consume online. It depicts the carbon footprint of the users’

consumption records (based on the data generated by Alipay, the biggest online payment platform in China and a product of Ant Financial). User's "green behaviours" are rewarded through the allocation of "green energy points". As their points accumulate to certain levels, game users can choose to plant a tree in the real world or virtually claim a small piece of land in one of the conservation areas co-funded by Ant Financial. Based on the amount of green energy points, the game users can choose between several kinds of tree species, including the saxaul, apricot tree, sea-buckthorn, oriental arborvitae, Chinese pine, Scots pine, rose willow, scoparium, and desert poplar.

Ant Forest also has interactive functions which allow the users to co-plant trees, steal points from friends (collect points from others), and water trees for others (donate points to others). These features are very popular among users and contribute to their active engagement with the programme, leading to a growing adhesiveness of users. According to the Alipay Sustainability Report from 2019-2020, by May 2020, the participants of Ant Forest had amounted to 550 million people, and more than 2 million trees had been planted in the real world (14).

Apart from its enormous social influence, Ant Forest also brings substantial competitive advantage to Ant Financial and its related business entities through mainly two ways. Firstly, as a "green" initiative planting millions of trees, Ant Forest has created a positive image of its related business entities, such as Ant Financial and the Chinese Alibaba Group, the world's largest retailer and online trade company. In turn, Ant Forest users generally see Alibaba as a mega-sized leading business group with much sense of social responsibility and environmental awareness.

Secondly, Ant Forest enhances users' dependence on Ant Financial by creating the game rules. Ant Forest requires players to act in specific ways to earn "green energy points", such as walking, hiring shared bikes or making payments with the Alipay app. These actions are defined as "green behaviours" in Ant Forest. Almost all possibilities to earn "green energy points" in the game, except for walking, are exclusively related to the adoption of services or products from Ant Financial or Alibaba. For example, only by buying cinema tickets through the Alibaba-owned online platform Taopiaopiao, and not any other similar platform, can generate points. As a result, users are increasingly relying on the services of Ant Financial, especially on Alipay.

Ant Forest is a programme based on the idea of "green" consumerism, and it aims to cultivate a "green" lifestyle for addressing environmental problems. However, the capitalist logic of expansion, accumulation and competition has been fully reflected on the rules of Ant Forest, and thus results in a clear contradiction between its environmental goals and its real influence on users. It also delivers simplified information about complex environmental issues and creates the idea that consumption can be compensated with tree-planting or conservation activities. Therefore, it actually hinders its users from fully understanding the environmental implications of their consumption behaviours (15).

The trajectory of forestation projects in China: from GMC to Ant Forest

China has long been puzzled by the ecological consequences caused by large scale deforestation, such as rapid desertification and frequent floods, which seemingly justify the importance of tree-planting projects. However, there are different voices questioning the effectiveness of these projects, arguing that these further result in new ecological problems. (16) For example, according to professor Cao from the Minzu University of China (17), more than 80% of the tree plantations in the Three Norths region involve monoculture plantations, which result in a vulnerability of trees to plant diseases and insect pests as well as an array of other impacts. Despite the critiques, forestation is still one of the main focuses of Chinese environmental politics.

This article introduced three well-known afforestation projects in China in different time periods. In the 1950s, GMC was launched for tackling the frequent flooding and for producing more wood. In late 1970s, the TNSFP, established at the same time as the national economic reforms, began to establish the bases for a free-market economy in forestation projects in China. And more recently, the Ant Forest App created deep resonance with the public with its “green” consumerism goals, which enabled it to acquire a large number of users while working with the state in tree-planting projects.

In 2020, according to the plan made by the National Department of Forestry, Ant Forest is going to financially support the planting of 720 million trees (18). From GMC to Ant Forest, the mass forestation projects implemented since 1949 outline a trajectory evidencing the increasingly important role of capital and market forces in rural China.

Zeng Zhen, syndi.zeng@outlook.com
University of Helsinki, Finland

(1) “Beautiful China” was first put forward as a governing concept by former President Hu Jintao on the 18th National Congress in 2012. It underpins that achieving an ecological wellbeing is one of the prominent tasks of the Chinese government, along with the development of economy, politics, culture and society. President Xi Jinping reaffirmed this task on the 19th National Congress in 2017 and since then, he has been continually enriching this notion.
(2) Long, J.J, 2007, ??????????????--20??50?? ”????????”?????? “The Herald of Modern Environmental Protection Movement in China?a study on ‘Greening the Motherland’ Campaign in 1950s”
(3) Ibid Long 2017
(4) Ibid Long 2017; Sun T., 2018, *??????????????????, “The Changes in Sociopolitical Conditions and the Environment in Modern and Contemporary China”*, Intellectual Property Publishing House, Beijing
(5) Ibid Sun, 2018; Xu, B., 2014, ?400???????????????, “The Social Change and Ecology in Western China in the Past Four Centuries”, China Social Science Press, Beijing
(6) Zhang, B. X., 2013, *?????, “The Records of Three-North Shelterbelt Forestation Project”*, Xinhua Publishing House, Beijing
(7) Ibid Zhang 2013
(8) Ren, Y., & Gao, Z.Y., 1996, ??????????????????????, “Exploring on the Basic Theoretical Framework of the system of Eco-Economic Protection Forest”, *Journal of Beijing Forestry University*, Vol.18, Supp.2, pp.1-7
(9) Ibid Zhang 2013
(10) Song, B. C., 2000? ??????'??'? “Standard Management of Rural “ Two-Work” System, *Agriculture Knowledge,* 2000-10, pp.49
(11) Ibid Zhang 2013
(12)Ibid Zhang 2013
(13) According to Ant Financial, Ant Forest is designed as an archetype of personal carbon account system
(14) Alipay, 2020, *ALIPAY SUSTAINABILITY REPORT 2019-2020 :Towards A Better Society For the Future*, Ant Group , (Access on 24 June 2020)
(15) Zeng, 2018, *Saving the World by Being Green with Fintech: the contradictions between environmentalism and reality in the case of Ant Forest*, Lund University, Lund, (access on 6 June. 2019)
(16) Zastrow, M. 2019, "China's tree-planting drive could falter in a warming world", *Nature* (London), vol. 573, no. 7775, pp. 474-475; Cao, S.X., 2008, Why Large-Scale Afforestation Efforts in

China Have Failed To Solve the Desertification Problem, *Environment Science & Technology,* 42:6, 1826-1831
(17) ibid. Cao, 2008
(18) forestry.gov.cn, 2020, *???????????“????”????????* “China Green Foundation Firmly Promotes the Spring Afforestation Project of Ant Forest. National Department of Forestry", (accessed on 8 Aug. 2020)