

SALT OF THE EARTH

by Robert Watt

THE AREA PRODUCES OVER A MILLION TONS OF SALT A YEAR BUT THE TAX REVENUE IT GENERATES IS TINY COMPARED WITH THE FACTORIES AND SHOPPING MALLS STEADILY ENCROACHING FROM THE DISTANCE.



Sorted salt are piled up high

I've been out this way before, out from the city towards the sea. Driving out over the flat, low lands beyond Binhai and it still strikes me how featureless, how barren, how unforgivingly hostile this area feels. Last time it was towards an isolated village and its old fishing fleet moored at the water's edge, this time it's to the ancient salterns.

Like the fishing industry, Tianjin was once famous for its salt production. It exported, what Chinese proverbs call 'one of the seven necessities of life', throughout China and beyond. It has been credited with being the driving force behind China's social development because the huge tax revenue it created necessitated the organisation and administration to enforce, protect and collect

it. Like the fishing industry, collecting salt from the sea is hard physical work, the environment is often tough and is a tradition in decline.

Culture and history

The flooding by the Bohai Sea and nearby rivers have made the soil in this region too salty for many plants. It explains the lack of trees and shrubs, the shortage of wildlife. It's a harsh environment; fiercely hot in summer and bitterly cold in winter, unsuitable for farming or rearing animals. However, there is evidence of Neolithic man and it is likely they fed on and traded the abundant fish and the natural salt reserves of the coast. The salt marshes would have protected them from invaders too. Under the dry summer sun, pools would dry out and the salt deposits

would form naturally. As time went on the natural process of collecting salt was enhanced by the creation and management of the water into ponds. By the time of the Tang dynasty, salt was the biggest source of tax revenue and remained important well into the 20th century.

I arrive by car with Mr Liu, one of the product managers at Changlu; the largest sea salt producer in China. The company traces its roots back to 935AD. His family also has a long history of working in the industry. His sister, helping me with travel and translation, remembers growing up with thousands of other families in single story housing provided by the salt companies. She tells me the old village was pulled down during the 1980s and 90s, everyone was moved into modern



The Changlu Salt Factory

facilities and the local schools closed. The Liu family story is typical of the families I met in the shrinking fishing village last year. The younger generations, now working in other careers, drifting away leaving the parents and grandparents behind.

The Salterns today

If you look at aerial pictures of land around the Bohai bay, from as recent as the early 1980's, the coastline is rimed with plumes of white like the head of a cauliflower. Today there are only 1 or 2 companies, but there are ponds as far as can be seen. From the edge of the city, marked by the sudden halt of high rise apartments, to the sea and left and right to the horizon lies dried white deposits, or the mirrored waters of the brine ponds. Each is ringed by rows of red bricks that reinforce the banks. The ponds are in different stages of production, those drained and dried of moisture a foot deep with the large crystals the area is famous for. Others are filled with the brine that will either evaporate naturally, or be pumped to drying machines to produce finer grains.

We climb down into one of the dried ponds and find the salt is surprisingly solid beneath our feet. Large patches have been scraped away to reveal the dark clay beneath. The extraction is being done by diggers and dumped into low trucks that speed continuously up and down the network of roads. The mechanisation has removed the back breaking work that was once done by men with shovels. Although it's warm today the drivers are well wrapped in scarves and

thick coats, only patches of their skin showing. In the open trucks there is no protection from the Siberian winter winds whipping across the landscape and no shade in the sweltering summer. It's unsurprising the workers are dark skinned.

In the trail of trucks we follow the freshly dug salt to where it's dumped into a machine. The contraption is a web of belts, cascading water and whirling motors which shake and sort out the soil and stones. It's a primitive piece of mechanics, but surprisingly efficient in producing a constant supply of brilliant salt creeping along a series of conveyors onto an already massive white mountain.

The effects of modernization

The principles haven't changed. The sun, the sea and the flat land uses the same natural processes. The waste produced, no more than a stream of salty water which returns into Bohai bay and a small pile of stones and clumps of dirty salt that didn't separate. A man is collecting some in a bag and I worry that this might be destined for some black market. But I'm told it's used in traditional medicine as a type of poultice.

It's hard to imagine though, how this area would have looked during the old dynasties when windmills pumped the sea water into the ponds. As well as the machines and the city standing ominously on one side, strings of thick electric cables stretch between long lines of posts. There are tufts of coarse dry grass along the rails that support the sorting machine, but mostly the ground is barren, poisoned by the salt spilled and churned into

the road sides by the wheels of trucks. Before the mechanisation, the work would have required a mass of laborers rather than the few dozen visible today. The area produces over a million tons of salt a year but the tax revenue it generates is tiny compared with the factories and shopping malls steadily encroaching from the distance.

In the same way that fish farms increased the efficiency of fishing and helped in the decline of traditional fleets, so the mechanisation of the salterns has reduced the value of the salt industry. But just as Tianjin remains famous for its sea food, its cuisine has been left with a legacy of salt preserved vegetables and the generous use of salt in its traditional dishes.

盐地探访

很多人都知道，天津出产海鲜，而紧靠渤海湾的天津也是著名的盐产地。“柴米油盐酱醋茶”，盐是中国人生活中最重要的七件事之一，也是政府主要的税收来源，受到严格的管理和掌控，而海盐的开采也是一项非常艰苦的体力劳动。

渤海湾的海水和附近河水的冲刷让这片土地的盐分奇高，已经不宜植物的生长，所以这里罕见树林、灌木以及野生动物。这里的环境很艰苦，夏天酷热，冬天极冷，同样不适合农作物和动物生存。但是这里最早的居民就是靠打渔和采盐为生，同时这些盐碱滩也曾经帮他们抵御外敌入侵。在夏日骄阳的暴晒下，水塘里的水蒸发，形成了天然的盐池。后来人们掌握了更先进的采盐技术后，盐的产量大幅增长，到唐代，盐已经成为国家最主要的税收来源。

我跟随长芦盐业的刘经理来到他们的采盐场。长芦盐业是中国最大的海盐生产企业，其历史可以追溯到公元 935 年。刘经理的家族几代人也在盐场工作，他的妹妹能说英文，成为我的随行向导和翻译。她还记得小时候，盐场的几千户职工家庭都住在盐业公司提供的平房宿舍里，这些宿舍在上世纪八九十年代陆续被拆除了，职工都搬到现代化的公寓楼里。年轻一代不愿意再从事海盐开采，纷纷走出村子谋求其他的发展，只有父母和老人还留在这里。

从渤海湾的俯瞰图上，我们可以看到海岸线镶着一圈白边。目前只有一两家盐业公司还在运营，曾经用来储盐的水池依稀可见。从城郊边界到海岸线，有很多白色的盐池，每个池子的晾晒程度都不同，有些已经干涸，呈现晶莹的白色，有些还汪着盐水。

我们爬到一个干涸的盐池里，发现脚下的盐非常坚固。大块的盐层已经脱落，露出池底黑色的泥土。大型挖掘机不停工作，把池里晾好的盐装到大卡车里，机械化的流程取代了辛苦的人工挖掘。虽然天气很暖和，卡车司机还是穿着棉袄和围巾，把自己包得很严实，因为露天作业的司机要经受西北风的拷打，夏天还要忍受骄阳的暴晒，每个人的皮肤都是黝黑的。

卡车把盐池里刮下的盐倒入一个机器里，在机器中盐能从砂石中分离出来。虽然机器装置看起来简陋，但工作效率很高，分离效果也不错。不管用哪种方法开采，盐的采集原理是不变的。采盐过程中只会产生高盐度的废水，这些废水还会流回渤海或无法分离的盐堆里。

眼前的盐场已经被各种开采机械占据，鲜少能看见采盐工人的身影。很难想象古代盐场的采盐场景，那时候人们还在用风车把海水灌到采盐池。这里每年能生产一百万吨盐，但纳税已经无法和现代化工厂和零售商业相比了。