

**INVESTMENT IN HUMAN CAPITAL AND AGRARIAN DEVELOPMENT.  
TENNESSEE AND CATALONIA (1880-1930):  
LIMITS AND POSSIBILITIES OF GROWTH**

Enric Vicedo-Rius

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In the present work we analyze –in terms of compared history- the answers – having similar nature- to problems which societies with different historical evolution have: Tennessee in USA and Catalonia in Europe. The study of the conditions under which the investment in human capital has taken place shows significant differences that explain the economic growth, solid in Catalonia and limited in Tennessee.

**KEY WORDS:** Catalonia, Tennessee, Human Capital, Agrarian Development, 1880-1930.

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**Abstract**

This study explores the role of investment in education on agrarian development. We consider the education of the peasantry in a wide sense: the programs by public institutions, the action of private institutions, such as farmers' associations, and the stock of knowledge that was transmitted from generation to generation, from father to son, that we can qualify as a nonmaterial inheritance. For this purpose, we compared a European society and another belonging to the new "Europe": Catalonia and Tennessee, respectively.

We observed a coincidence in time between the growth of the Farmers' Institutes in Tennessee and the congresses of the Catalan-Balearic Agricultural Federation (FACB), first, and later the agrarian extension activities by the *Mancomunitat* of Catalonia. The farmer surely needed more assessment to develop agriculture in a recently-colonized zone, while the Catalan peasant had agronomic know-how passed down from his ancestors. In both territories the education of farmers was adapted to the necessities of the different territorial realities. In Tennessee, the state had to fulfill a surrogate function for the nonmaterial inheritance, which did exist in Catalonia and most regions of Europe. However, in Catalonia it was essential to adapt agrarian practices to the more advanced practices of modern agriculture. Different problems, similar solutions.

There were difficulties in both Catalonia and Tennessee that could limit the effect on economic growth of investment in human capital. Catalonia was an industrially developed region. Despite the predominance of small-scale peasantry -with the consequent difficulties for capitalizing the farms- there was commercial agriculture, reinforced by a cooperative movement that, when it incorporated the average peasantry, consolidated its trajectory. The *Mancomunitat* allowed an improvement in the

traditional agricultural practices, generally well-orientated when the framework was an organic economy. The peasantry as a whole benefited from these actions.

Tennessee is a state in the southern United States with very limited economic growth. Despite a very well structured approach –by the Tennessee government often following federal policies- to spreading agrarian practices, proposals for crop rotation and suggestions for rationalizing and improving the farms and despite a development of cooperative and solidarity movements, Tennessee faced a question that complicated its possibilities for development: the marginalization and impoverishment of the black population. Owning little property, with contracts as sharecroppers did not especially favor the stability of the peasantry, with a critical health situation and little investment in education, it was difficult to encourage economic growth in a zone that had suffered a very serious crisis at the end of the 19<sup>th</sup> century, which was short of capital and whose infrastructure left much to be desired.

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**1. Institutions and investment in human capital.**

Some of the most significant historical studies in the last forty or fifty years have highlighted the importance of institutional realities for understanding the transformations of human societies. This perspective, first incorporated into the European Marxist tradition, has also been very intensely developed through the contributions of the New Institutional History. The Douglass C. North's work emphasized the role of the state when defining specific property rights at a determined historical moment. These rights are not always efficient enough to generate economic growth<sup>1</sup>.

The aim of this study is to explore the role of investment in education on agricultural development. The education of the peasantry is considered in the widest sense, including public programs, the activities of private institutions, such as farmers' associations, and the body of knowledge that is handed down from generation to generation, from parents to children, that we could qualify as non-material inheritance. The growing of even such relatively simple crops as wheat implied taking up to four hundred decisions, ranging from the preparation of the land to the final stages of production. For Jan Douwe, the farmers' aim is to be both independent (controlling the productive process) and self-sufficient, taking on a job that is both hard and delicate, and requires a high degree of professionalism, and that is recognized socially<sup>2</sup>. Farm work means responding to the challenges from the environment in which this work is carried out.

With regard to the role of education, various coincidental or critical visions have been developed from Theodore W. Schultz's work on the concept of human capital<sup>3</sup>.

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Schultz's consideration of investment in human capital as a key element for the increase in company production and, thus, workers' incomes, has been countered by the argument that remuneration for work depends less on education than on other factors, such as intelligence or social origin<sup>4</sup>. It has also been asked whether education plays the same function in the initial phase of economic development as at an advanced stage<sup>5</sup>. For Nelson and Phelps, education, as a stimulus for innovation, generates externalities<sup>6</sup>. The farmers with the highest education, who are the first to introduce innovations, are then imitated by other farmers. We accept the distinction that Robert J. Barro makes between the quantity and quality of education<sup>7</sup>. Quality training at a key moment of development can have some very positive effects on economic development.

However it is undeniable that high-quality educational approaches can be less effective if they are not sufficiently widespread among a large number of peasants, whatever their social and economic status. On the other hand, the results of this process of training human capital can be compromised by unfavorable economic factors that complicate the technical-productive improvements and insufficient political action and promotion of investment by the authorities at various scales.

## 2. Aims and study method.

Comparative history can supply sufficiently solid conclusions for an understanding of the role of the education of the peasantry in the economic and social progress of human societies. We propose a comparison of two societies: Catalonia in Europe and Tennessee in the United States of America for the 1880-1930 period. This period was chosen as one when significant efforts were being made to bring about social and economic changes to improve living conditions in both societies.

Why Catalonia and Tennessee? In first place, two different models are analyzed, one situated in Europe and the other in what Crosby defined as the “new Europes”<sup>8</sup>. These “other Europes” were the areas colonized by European immigrants in search of opportunities that were becoming ever scarcer in many European societies in which per capita resources decreased during the 19<sup>th</sup> century.

The settlement of Tennessee began in the mid-18<sup>th</sup> century, and in 1790, when the population had reached 35,791, of whom 3,417 were slaves, North Carolina ceded the territory to the United States. The Congress established a territorial government and the zone was called *The Territory of the United States southwest of the Ohio River*, before joining the Union in 1796 under the name of Tennessee. During the 19<sup>th</sup> century, it would be a territory for colonization, a very different situation from that of Catalonia, which already had agrarian structures and institutions with a multi-secular presence. The populations of Catalonia and Tennessee were of the same order of magnitude at the beginning of our study: 1,752,033 in 1877 and 1,258,520 in 1870 respectively. In contrast, the territory available for this population was very different: 32,049 and 118,104 square kilometers. In 1930, the population of Catalonia was 2,791,292 and Tennessee had 2,616,556. With a population much more similar than at the earlier moment, the relative increase in Tennessee is significant, undoubtedly being the result of the possibilities of occupying space.

The United States was one of the countries where the state intervened and invested little in the economy during the 19<sup>th</sup> century<sup>9</sup>. Gardner shows there was a growth in federal and state investment in agrarian research (in 1992 dollars) between 1900 and 1910 and then between 1920 and 1930, while it remained virtual stable between 1890 and 1900 and again between 1910 and 1920, although at much higher values in the latter period<sup>10</sup>.

In relation to Tennessee, we consider that the farmers needed the educational activity of the public institutions more than a large investment of money. It should be

borne in mind that the farmers who settled Tennessee –as in other areas of expansion- at first lacked agricultural knowledge adapted to the ecological conditions in these new farming areas. In this sense, it was impossible to imitate the processes that we know as the European agrarian revolution directly<sup>11</sup>. Thus we analyze these educational policies as we consider them to be relevant for economic development. Special emphasis is placed on the state policies, these supplying homegrown initiatives and developed the perspectives emanating from the federal authorities. State action would substitute the new colonists' lack of agrarian experience, which did exist in Europe. We apply the refinements that Gerschenkron introduced into the theory of imitation to agrarian development in relation to European development, noting that if some of the prerequisites that characterized the British model were lacking, these could be replaced by other available realities<sup>12</sup>. In this sense, state intervention could contribute to the industrialization processes in those European countries that lacked any of these prerequisites.

In short, the Europeans who reached the new Europes often had access to resources unavailable to them in Europe but were very frequently unable to apply the techniques of the Dutch and British agrarian revolutions. Many of them had no knowledge of modern agricultural techniques as they had been unable to apply these in their European places of origin, and, for those who did possess this knowledge, the physical conditions of the United States were very varied and thus they did not know the most adequate practices. In this sense, our work fits into a western context of agrarian transformations, specifically of adapting the techniques of the European agrarian revolution to America. In a meeting of the West Tennessee Farmers' Institute in 1899, a paper titled "Diversified Farming" was presented. It stated that eight of every ten farmers in the division grew "staple products" (corn, cotton, tobacco, wheat, hay, etc.) on the same land for years with a negative impact on the soil and the yield.

*To avoid this abuse of farm land, a large number of our most practical farmers have adopted 'rotation of crops', and, in connection, the growing of leguminous plants, particularly red clover and the cowpea or stock pea, by which the soil is supplied with food and put in good condition to be followed by almost any other crop. A close application of this rule will greatly recuperate our farm lands and restore them to their wonted fertility*

*much more cheaply and with greater durability than by the use of commercial fertilizers* <sup>13</sup>.

Catalonia, in contrast, was a Mediterranean region with its own well-defined historical character since the Middle Ages, with a predominance of small farmers and artisan producers. Agriculture had developed heavily orientated towards internal and exterior sales and the area had undergone industrial growth since the end of the 18<sup>th</sup> century<sup>14</sup>. During the period of our study, Catalonia was the area of the Iberian Peninsula that stood out for having developed an industry of capital and consumer goods and where the agrarian sector underwent significant transformations<sup>15</sup>.

On the land, the Catalan peasantry was rooted in a specific area, with small farms but with farming knowledge that included crop rotation with leguminous crops to allow the reduction of fallow periods and the recovery of nutrients, especially nitrogen. This traditional agriculture used methods adequate enough in general terms for the edaphic characteristics<sup>16</sup>. This agrarian practice was the result of the historical experience of various generations of farmers. In a society in which the peasantry lacked even the basic minimum schooling, one would have to await the agrarian educational activity of public and private institutions to see its effect on agrarian practices and living conditions. Our hypothesis is that the existence of this agronomic baggage transmitted from fathers to sons could initially be more of an obstacle than an advantage for involving the peasantry in the sessions and technical activities run by different institutions. However, the situation would change progressively.

Thus, in contrast with the European peasant who at least had a baggage of empirical agricultural knowledge, handed down from generation to generation, that was very often correct, the Tennessee farmer was initially alone to take decisions that were not always correct<sup>17</sup>. In both cases, there was a variety of natural landscapes that ranged from plains to mountains, and farming these required knowledge adapted to each situation.

### **3. Institutions and rural development: the transformation of the prior conditions.**

The study of the institutions and rural development allows us to pinpoint the transformation of the initial realities. Between 1880 and 1930 in both territories there was a process of development and consolidation of public institutions and the creation of farmers' associations that promoted agrarian development policies, although the

chronology in the two areas was very different. As will be seen, Tennessee was ahead of Catalonia, although it had some very unfavorable factors to overcome: as well as the inexperience of the farmers, there was the impact of the Civil War and the low social status of the sector in the eyes of American urban and industrial society.

Although in 1862, in the midst of war, the *United States Department of Agriculture* (USDA) was set up – developing and consolidating earlier activities by the federal government, some its employees wanted to go beyond simple technical assessment. Oliver Hudson Kelley's proposal, hatched between 1865 and 1867, to create the *Patrons of Husbandry*, a Masonic fraternity also known as the *National Grange*, was enthusiastically welcomed by American farmers<sup>18</sup>. In fact, Kelley had been a farmer from 1849 until 1864, when he accepted a job in the *USDA* in Washington. In January 1866, he began a mission to the secessionist southern states to collect information about the rural world for the *USDA*. Being a member of a Masonic fraternity not only did not close doors for him but rather the opposite, it opened them among the farmers to the point where Kelley reached a conclusion that would mark the birth of the *Patrons of Husbandry*: there was little chance of politicians healing the wounds between the northern and southern states after the civil war. Only a great fraternity could promote harmony and good relations. This would be the *National Grange of the Patrons of Husbandry*.

The *National Grange* bid to defend the farmers against the railway monopoly, which meant a quick growth in membership, developed the cooperative purchase of inputs in line with the criteria of the *Rochdale Society of Equitable Pioneers*<sup>19</sup>, created near Manchester in 1844, and fought for improvements in the living conditions and social status of farmers. Moreover, the *National Grange* promoted sales cooperatives, insurance (especially fire insurance), as well as fighting for equality between men and women and the development of education as an instrument of social progress<sup>20</sup>. In Tennessee, the *National Grange* also went into crisis quickly, although its approach would leave an important imprint that was taken up by later associations, such as the *Farmers' Alliance* from the 1880s and then, in the 20<sup>th</sup> century, the *Union Farmers' Educational and Cooperative Union of America*<sup>21</sup>.

**Table 1. Rise and fall of the granges in Tennessee and the United States, 1873-1876.**

| Date       | Tennessee |         |                                 | United States |         |                                 |
|------------|-----------|---------|---------------------------------|---------------|---------|---------------------------------|
|            | granges   | members | granges /<br>100,000<br>farmers | granges       | members | granges /<br>100,000<br>farmers |
| 19-05-1873 | 13        |         | 5                               | 3,360         |         | 52                              |
| 2-08-1873  | 60        |         | 22                              | 5,062         |         | 78                              |
| 18-10-1873 | 183       |         | 66                              | 7,325         |         | 114                             |
| 1-03-1874  | 548       |         | 196                             | 14,365        |         | 217                             |
| 1-09-1874  | 989       |         | 356                             | 20,365        |         | 308                             |
| 1-01-1875  | 1,042     |         | 372                             | 21,697        |         | 320                             |
| 1-10-1875  | 1,092     | 37,581  | 389                             | 19,007        | 758,767 | 279                             |
| 1-07-1876  | 402       | 19,411  | 174                             | 15,127        | 588,525 | 217                             |

Source: Buck, Solon J., (c1913): *The Granger movement; a study of agricultural organization and its political, economic, and social manifestations, 1870-1880*, pp. 58-59. (Harvard, 1913).

With regard to the institutions in Tennessee, the Civil War (1861-65) had generated a very difficult situation, as it had in the other Confederate states that were finally reincorporated into the Union<sup>22</sup>. In 1866, the prewar administrative regime was restored in Tennessee and, a few years later, the *General Assembly* of Tennessee began to promote new measures to stimulate the rural world. In 1871, the *Bureau of Agriculture* was created, with the governor choosing its six members (two for each of the three great divisions of the state), who in turn elected a president and a secretary<sup>23</sup>. Given its inability to comply with the 1871 act, the *General Assembly* repealed it in 1875 and authorized and required the governor of Tennessee to create a *Bureau of Agriculture, Statistics and Mines for the State of Tennessee*, finally known as the *Tennessee Department of Agriculture* (TDA)<sup>24</sup>. The office would be run by a Commissioner appointed by the governor and with the approval of the state senate. The *Commissioner of Immigration* was also created with the job of promoting the arrival of settlers in the state. Although the first large study carried out by the *Bureau of Agriculture* dated from 1872-1874, Tennessee state policy would take time to take shape and have an effect on the living conditions of farmers. The expansive context was changing. In 1898, Tennessee no longer appeared on the list of states eligible to receive public land for their economic development<sup>25</sup>.

What was the diagnosis of the situation of the state at the beginning of the 1870s? Despite the abundance of natural resources in the state of Tennessee, the truth is that there were important obstacles for their exploitation at the beginning of our study. The possibilities for generating agrarian wealth through the farmers and the farms were constrained by some special disadvantages, according to the biennial report from the *Bureau of Agriculture*<sup>26</sup>. These were, in no particular order, the necessity to obtain more active capital, reduce the size of the farms, and to manage to take on the important expense implied by the construction and maintenance of fences. An added factor was the scarcity of skilled manpower and the lack of confidence in obtaining wealth through farming, which implied neglect of this activity. Moreover, many old farmers felt unable to adapt to a 'free labor' situation and wanted to stop farming. On top of this, we must add the reduced presence in external markets and costly transport. It was not until the end of the 19<sup>th</sup> century/beginning of the 20<sup>th</sup> century when a great wager would be developed through the TDA.

Let us highlight one of the difficulties spelt out in the report by the Bureau of Agriculture: the difficulties that many older "white" farmers had to adapt to a situation of non-slave working. The black population had two options: leave the place where they had worked as slaves and go elsewhere in the south; or stay where they were and try to set up a small unit of production. While at first, the planters attempted to apply new forms of pressure on the black workers, they met strong resistance and often failed to achieve this control. Black farmers often agreed to work the land as sharecroppers, but, as Stanley L. Engerman observes, sharecropping was not usually a rental contract in which the tenant-operator took decisions about the crop. It was in fact, a form of share-wages that depended on the value of the production under the owner's control. Around 1890, a quarter of the black farmers owned the land they worked while two thirds of white farmers owned land, which tended to be larger and more valuable than that owned by the negroes<sup>27</sup>.

Between 1880 and 1920 the population of Tennessee grew by around 50%, half the rate of the Union as a whole. The white population rose by 65.6 % and the number of blacks by 12.1%<sup>28</sup>. These demographics can be explained by two factors: the crisis at the end of the 19<sup>th</sup> century that seriously affected the south and a situation of clear discrimination against the black population, which is analyzed below.

Woodward<sup>29</sup> shows that the depression began before 1891 in the south and was longer and deeper than in the nation as a whole. Wright<sup>30</sup> has defined the south as a

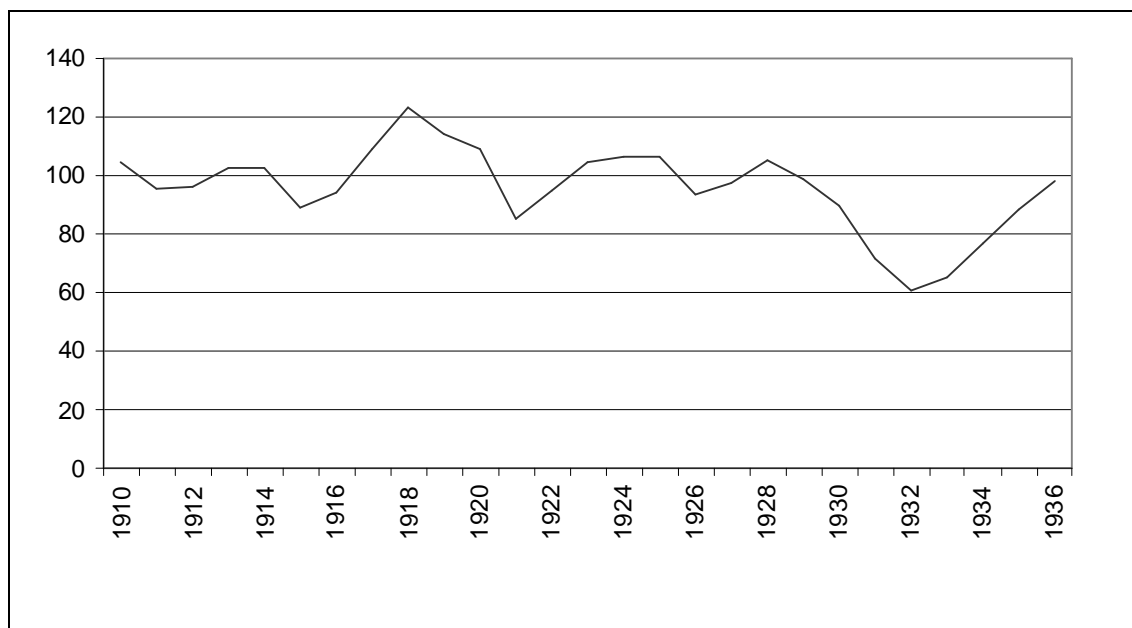
regional labor market from emancipation to the great depression. Evidence for this is the constant circulation of sharecroppers and tenants around farms in the south during this period. In this sense, the studies by Kyriakoudes for the end of the 19<sup>th</sup> century and early decades of the 20<sup>th</sup> show a tendency to migrate from Middle Tennessee to Nashville, emigration by whites and blacks, that favored the former through a greater investment in education that encouraged them to seek non-agricultural jobs in the growing urban world<sup>31</sup>.

From 1910 and until the early 1920s, although the final collapse did not happen until after 1929, the situation was favorable for agrarian activity in the United States<sup>32</sup> and in Tennessee. Between 1910 and 1915, the prices received and paid by farmers in Tennessee were balanced, followed by a rise in the prices received by farmers from 1915/1916 until 1920. There was partial recovery that ended in 1929.

#### Graph 1

#### Comparison of prices received and paid by Tennessee farmers, 1910-1936

1910-1914 = 100



Source: *Index Numbers of Prices Received by Tennessee Farmers, 1910-36 With Comparison*, in *Monograph*, n° 41, p. 5. Agricultural Economic and Rural Sociology Department. Agricultural Experiment Station, University of Tennessee, Knoxville, 1937.

Such a favorable situation<sup>33</sup> coincided with the years when the TDA played a leading role, with the works of the Tennessee Experiment Station and the Farmers' Institutes. The encouragement of these institutions and the favorable exchange rates we

have observed must have affected the economies of those farmers –both owners and tenants- who worked the land and sold their products –totally or partially– on the market.

Often following directives from the USDA, the authorities in the state of Tennessee made efforts to stimulate the rural world, promoting new actions and incorporating and divulging private experiences. The pacification between farmers and the railway companies, the rationalization of farms and promotion of immigration, the development of communications, and the development of the Farmers' Institutes, that allowed the farmers to associate with the aim of learning about agronomy and the agrarian economy were the main lines promoted by the TDA with the vital collaboration of the Tennessee Experiment Station.

The situation in Catalonia after 1714 was one of a lack of nation-wide political institutions. There were only the local councils and the division into four provinces, the latter controlled from Madrid through civil governors. Each province had a provincial council to apply state policies in its area. There was an important lag in Catalonia in the promotion of agrarian development by the Spanish state institutions. Some data is significant: the first modern population census was carried out in 1857 and the first agrarian census not until a century later in 1962. In the final decades of the 19<sup>th</sup> century and early 20<sup>th</sup> century, some studies were undertaken about specific productive aspects such as cereals, vines, olives, livestock, irrigation, etc., coinciding with the creation of the Agronomic Service<sup>34</sup>.

In the private field, the Catalan Agricultural Institute of Sant Isidre (IACSI) was created in 1851, promoted by the Catalan landed gentry. It was tasked with a double objective: to defend property and promote a range of improvements in techniques and production<sup>35</sup>. The IACSI backed the creation of the Catalan-Balearic Agricultural Federation (FACB), which held an annual congress from 1898 to the early 1920s. These congresses were very similar to the Farmers' Institutes in Tennessee, with the difference that in the United States, they were promoted by the Tennessee state authorities, under the impulse of the USDA<sup>36</sup>. A change came about between 1914 and 1923, when the *Mancomunitat*, or Commonwealth, of Catalonia was created. This was an association of the four provincial councils, and the development of agriculture was one of its main objectives<sup>37</sup>. It was during this period that several research laboratories were opened and

the results of their studies were distributed with the aim of improving the practices of the Catalan farmers.

With regard to the association movement in the rural world, the Spanish state did not pass laws until the end of the 19<sup>th</sup> century. Two laws that marked moments of change can be highlighted: the 1890 royal decree about the agrarian chambers and the 1906 law of syndicates. The agrarian chambers created under the former law were mainly instruments for the medium-sized owners and landed gentry to defend their interests, with few specific activities in the service of the peasantry<sup>38</sup>. In contrast, the agrarian syndicates that arose from the 1906 law were capable of organizing cooperatives to facilitate the incorporation of inputs in the agriculture of their members, and, with more difficulties, for cooperative sales. In Catalonia, the landed gentry often promoted these syndicates-cooperatives as an instrument for technical-productive development that was, moreover, thanks to the resulting growth, capable of reducing social tensions<sup>39</sup>.

Frequently these cooperatives ended up disappearing or entering into a state of limited initiatives that did not allow them to fulfill their objectives. Despite state laws favorable for their development, the application of these was not always facilitated and many rich landowners did not see how the cooperatives could benefit them. Garrido has shown that their survival often depended on their economic capacity, limited when the cooperative mainly comprised small peasants. The importance of Catholic syndicalism in the Valencia region, with a great deal of ideology and a management that frequently demoralized the members and ended up by distancing them from any cooperativism, is another of the factors that explain the crisis of the cooperatives in some regions. For Garrido there were two conditions necessary for a territory to host a significant number of cooperatives able to survive and advance: during the second half of the 19<sup>th</sup> century the peasant economies had been able to adapt their production to the market and there had to be a significant group of medium sized landowners<sup>40</sup>. Catalonia would respond, with some qualifications, to these historical transformations, which would explain the dynamism of a significant part of cooperatives. This did not mean that, for example, the cooperative-wine cellars in the Tarragona area had to indebt themselves with the traders-lenders, which restricted their marketing autonomy<sup>41</sup>.

Although Catholic syndicalism was less present in Catalonia, it developed to an extent in the 1920s, which divided the peasants even more. In some cases –such as Pierola, studied by Planas and Valls<sup>42</sup>, the crisis of cooperativism was due to two

reasons: such a small place had no possibility of maintaining two cooperatives, which were also in conflict with each other about social and economic questions: one ended up representing the “rabasaires” and the Catholic syndicate represented other interests, fundamentally those of the landowners.

#### **4. Differential institutions and actuations in Tennessee and Catalonia.**

Our research into Tennessee and Catalonia leads us to coincide with Sally H. Clarke in the sense that no advanced European country in the final stage of our study enjoyed a public support system for the agrarian sector like that in the United States, and Tennessee<sup>43</sup>. We shall see what the institutions were and their policies in relation to the education of farmers in Tennessee and Catalonia. We refer substantially to the actions related to the agrarian training of farmers –in both the agronomic aspect and for a better relation with the market, the role of the technologic centers in this strategy, and the actions aimed at children and young people in their training as future farmers.

In Tennessee, one of the fundamental pieces for all the actions for the agrarian training of farmers was the Agricultural Experiment Station at the University of Tennessee, created in 1882. This station continued and extended the experiments carried out by the School of Agriculture, Horticulture and Botany between 1879 and 1882 under professor J. M. McBryde. The first director was J. W. Glenn, professor of Agriculture, Horticulture and Botany at the University of Tennessee, who substituted professor McBryde, the new president of the University of South Carolina. This station was part of the process of divulging the methods and techniques of modern agriculture and livestock farming whose application was then spreading in both the United States and Europe. The Agricultural Experiment Station produced three types of publication. There were the *Annual Reports*, reflecting the research done in the station’s departments, the quarterly *Bulletins*, brief documents with the first conclusions on themes that required a first publication of results and, finally, the *Special Bulletins*, which were not regular publications, dealing with questions that worried the farmers and that did not require prolonged research.

The TDA carried out a basic task of quality control for two essential products for the development of agriculture and livestock farming: fertilizers and feedstuffs. The TDA had a great interest in promoting all those themes that could favor the farmer through specific publications, or through the monthly magazine *Tennessee Agriculture* from 1912. These ranged from the results of an analysis of fertilizers to the acts of the

Farmers' Institutes where specializations with market possibilities were recommended, along with better agrarian practices and all kinds of productive questions and others that affected the economy and living conditions of the farmers. As well as the special trains, the fairs were an excellent opportunity to propose lines of development or show the experiences of a determined zone. For example, in 1914, 26 fairs lasting 3 or 4 days were held during August, September and October. Each fair corresponded to a single county, while the one in Nashville was at a state level and the one in Memphis covered three states.

Thomas H. Paine, Tennessee Commissioner of Agriculture, encouraged the development of the Farmers' Institutes, in existence as such in Tennessee since 1899, following the experience of neighboring states where these institutions had had notable success, especially in Illinois<sup>44</sup>. These meetings enabled the farmers to receive the results of the research in the experimental station, as well as the contributions that could be made from other fronts both inside and outside the state, and not only in relation to technical-productive questions but also with regard to improvements in the living conditions of farmers. This was the great educational question that the authorities faced. The Farmers' Institutes declared themselves non-partisan and non-political, although interested in economic policy, and favorable to the theoretical and practical schools, open to free discussion and comparing experiences. In Tennessee, three were finally constituted, one for each large division (East, Middle and West), and they met annually.

A major concern for the department of agriculture was to circulate the speeches and discussions of the Farmers' Institutes to the point of including the minutes of the meetings in various publications, from the Biennial Reports to books that contained the minutes of various meetings. Finally, during commissioner Thomas F. Peck's tenure, the monthly magazine, *Tennessee Agriculture*, used to publish the minutes of the Farmers' Institute, was already fully consolidated. This magazine appeared in 1912 and constituted a fundamental source for spreading the proposals and activities from the TDA. Undoubtedly, those farmers without special knowledge would more easily understand the works or agrarian advice published in *Tennessee Agriculture* than the studies in the more technical language of the Agricultural Experiment Station.

The recommendations by the Farmers' Institutes that affected the farmers, but also the public authorities and the private field, can be grouped into five principal areas:

1. More adequate agrarian practices, among which was the popularizing of systems of rotation for better crops, or improvements in the production of pasture in relation with livestock.
2. Specializations favorable to the farmer. Opportunities were presented to export profitable new agricultural and livestock products to new, generally urban, markets outside Tennessee.
3. Development of the infrastructure needed for the good working of the farm. The construction of silos was one of the most widespread measures.
4. Development of transport - fundamentally railways and roads.
5. Improvements in farmhouses to ensure minimum conditions of habitability to guarantee the dignity of farmers.
6. Rationalization of the domestic economy, in which the farmers' wives and also their children played an important role.
7. Development of education for children and young people.

The Farmers' Institute's main activity was the annual meetings of each of its three divisions –East, Middle and West. Farmers from all the counties were represented and they brought together the diversity of situations in the different counties. All this guaranteed that the meetings at the division level dealt with real problems. The counties could organize institutes and there was finally a State Institute made up of a limited number of representatives from all the counties -250 in 1900, in the meeting held in the Senate Chamber in Nashville. Such a representative organization meant a high attendance at the sessions of the Division Institutes. For example, the West Tennessee Farmers' Institute was attended by 750 delegates in 1899, and 1,000 in 1900. Over these two years, the Middle Tennessee Farmers' Institute welcomed 1,500 delegates. The meetings of the East Tennessee Farmers' Institute totaled 1,200 delegates in the same years<sup>45</sup>.

Activities equivalent to the Farmers' Institutes had a long tradition in East Tennessee. The East Tennessee Farmers' Convention met annually from 1876, dealing with similar themes to the Farmers' Institutes<sup>46</sup>. In 1893 other farmers' division conventions were active. These were reconverted into Farmers' Institutes in 1899. In the East Tennessee Farmers' Convention and Institute, in May 1900, the conversion had already happened. And the educative task of this institution was valued:

*I am persuaded, sir, that agriculture is on an ascending plane in our country today, and I am of the opinion that there is no section that gives greater evidence of this fact than our own beloved East Tennessee. I believe that much of this is attributable to the wholesome and educative influences flowing out from the annual gatherings of this East Tennessee Farmers' Association<sup>47</sup>.*

On the other hand, at the end of the 19<sup>th</sup> century, the USDA encouraged the work of Seaman A. Knapp, defined by the community leaders in Tennessee as a great friend of the south<sup>48</sup>. During James Wilson's stage as federal secretary of the USDA, Knapp worked as a special agent to promote better farming methods in the south<sup>49</sup>. He developed and ran the Farmers Cooperative Demonstration Work division, which was taken over by his son, Bradford after his death in 1911<sup>50</sup>. Knapp formulated his proposals for all the rural world, but emphasized children and young people. He intended to work the land at the lowest cost to obtain the best result, convincing the farmers in the south that growing various products on the most suitable land would diversify production and make it unnecessary to buy in other products from outside the farm. For Knapp, the young people had to have greater ease to free themselves from servitude in comparison with the old inadequate practices<sup>51</sup>.

One of the strategies that the USDA and the TDA used to make the farmers feel rooted in their profession was to promote an interest in agriculture among their sons and daughters. In contrast to Europe, where even the smallest hamlets had a rich multi-secular history, Tennessee had been uncultivated until very recent times. Thus, the arguments for putting down roots were much weaker.

Seaman A. Knapp had wide experience. He had settled in Iowa on his own sheep farm, had held various positions in the Iowa State College Farm and established an experimental field in Ames in 1879. In 1873, he organized and ran the Iowa Improvement Stock Breeders Association and, three years later, founded the *Western Stock Journal and Farmer*. In 1882, he drew up a draft for the federal law to finance the experimental stations assigned to the agricultural colleges that would be included in the Hatch Act of 1887. His prestige allowed him to apply his farming methods in Texas, which allowed the problems of cotton growing to be overcome. His demonstrations were one of the methods that he would later develop through the USDA. To ensure the success of his County-agent plan of 1906, he encouraged the promotion of the Boys'

Cotton and Corn Growing Clubs and, in 1910, the Girls' Corn and Poultry Clubs<sup>52</sup>. All this activity undoubtedly helps to explain why Knapp was a reference for the education of children and young people, as well as for the farmers in Tennessee as a whole. The development of these ideas implied bringing farmers or minors together to learn and develop projects for Tennessee. Federal and state policies, education and economic development formed a trilogy that would produce very significant results.

The application of these general principals to specific projects, such as the Girls' Canning and Poultry Clubs, can be summed up as stimulating interest and cooperation inside the family, making girls learn and earn money through the sales of their products, and providing the family with better alimentation at minimum cost through the production of kitchen garden and farmyard products. All this was done with the idea that they could teach other girls in the future about these activities that were so important for the reproduction of the family farming unit.

It may be interesting to analyze the philosophy and the approaches of the boys' clubs, which recuperated the approach by Seaman A. Knapp. In December 1912, the Boys' Corn Club Work was organized in Middle Tennessee<sup>53</sup>. The founding document clearly states the objectives and the organization of the club bearing in mind that they could form clubs at the county level. The development of practical and scientific farmers, and the union of the youngsters of Middle Tennessee were the objectives of the club that were reinforced with competitions and prizes and the spreading of agrarian documentation<sup>54</sup>. This document is proof of the link between this activity and those of the Farmers' Institute, as well as the interest in educating the future farmer in production methods more in tune with technical progress. In the meeting of the Middle Tennessee Farmers' Institute in 1913, more than a hundred young members of the club entered the competition for the best young corn grower<sup>55</sup>. The previous year, at the same meeting, in her speech, *The farmer's best crop*, Mrs. Rose Nipher gave an example of a member of one of the clubs who presented the following results. With a tenth of an acre of land, he had supplied his family with tomatoes to a value of \$3.40, sold fresh produce to a value of \$2.70 on the market, and sold canned goods to a value of \$28.15 and other products for a value of \$2.25. The total income was \$36.50<sup>56</sup>.

Thus, it was not a question of only training future men and women farmers. As the example of the *Girls' Tomato Clubs* and the *Potato Club Boys* show, without forgetting the *Boys' Corn Clubs*, an effort was made to generate economic resources, that included supplying the family and selling the surplus. As J. E. Converse, federal

representative of the USDA stated, Tennessee imported between 4 and 5 million bushels of potatoes per year, but had enough adequate land to produce several times more. His aim was to demonstrate, from the results of the *Cumberland County Potato Club Boys*, that, despite the need to fertilize the land to produce potatoes, it was possible to make an interesting profit. Resistance to producing potatoes was observed among the audience because the land was considered to be very poor<sup>57</sup>.

For Virginia Pearl Moore, the Canning and Poultry Clubs and Tomato Clubs (or garden clubs) were in the home-making, domestic work line. She notes that, although domestic science had been introduced into the secondary schools, there was a separation between the elementary school and the home, a period when, according to the propagandists, a person's character is formed. Moore stated the necessity to reform the contents of education, limiting that other more ephemeral knowledge, which is forgotten 'after examination'<sup>58</sup>.

The Catalan situation was very different. The Spanish state had done very little until the later decades of the 19<sup>th</sup> century, with the creation of the Agronomic Service, and the expansion of the services during the first third of the 20<sup>th</sup> century. In the 1860s the School of Agriculture was created in Aranjuez, but soon it moved to Madrid<sup>59</sup>. In Catalonia, at the end of the 19<sup>th</sup> century, they were private institutions such as the Catalan-Balearic Agricultural Federation or provincial institutions, the provincial councils or the *Mancomunitat* of all these, who initiated a task that would end up being very important. The congresses held between 1910 and 1915 are an example. They were held in various district capitals in Catalonia and the Balearic Islands, field of activity of the Catalan-Balearic Agricultural Federation. These were characterized by low attendance, if we compare them with the Farmers' Institutes of Tennessee, of between 93 and 316 congress members. Some of the themes chosen for each congress were almost always related to the problems of the *comarca* (district) where the sessions were held. In 1910, in Tàrraga, in the Urgell district, themes analyzed included the "Production and collocation or use of cereals and forage in the Urgell and the Segarra" or "Production and circumstances under which agriculture is developed in the Urgell and the Segarra"<sup>60</sup>. In 1911, in Girona, in the Gironès district, there were themes related to forestry, one of the region's riches, including "Forests in general", "Production and improvement of cork" and "Chestnut and hazelnut trees", among other themes<sup>61</sup>. In 1912, in Ibiza, one of the Balearic Islands, the general theme referred to the rational use of fertilizers. For example, "Land, crops and livestock on the island of Ibiza" or

“Production and application of organic fertilizers, especially manures on the island of Ibiza”<sup>62</sup>.

Some congresses dealt with themes that could be useful for all the Catalan peasantry. The 1913 congress, held in Igualada in the Anoia district, dealt with the problem of the agricultural association, both based on cooperation and in the mutuality<sup>63</sup>. The congress in Balaguer, Noguera district, in 1915 dealt with those subjects related to dairy cattle: feeding, hygiene, and association for the creation of dairies<sup>64</sup>. These were two key issues in the context of the expansion of the cooperative movement<sup>65</sup> and the improvement in the diet of the Catalans, in which milk played an important part<sup>66</sup>.

Coinciding with the beginning of the above-mentioned congresses, Barcelona Provincial Council created the Provincial School of Agriculture in 1898 for the training of medium level engineers, with the Madrid School monopolizing higher education, as corresponded to a centralised state. Higher studies were done in Madrid, but the Higher School of Agriculture in Barcelona was created in 1912, and in 1918, it was incorporated into the *Mancomunitat* of Catalonia, an institution that covered the four Catalan provincial councils<sup>67</sup>. This institution would work on the aspects related to the improvement of the agrarian culture of the Catalan farmers. Although it also worked on other subjects, such as improving communications, agrarian credit or social action, an important event was the creation of the Agriculture Technical Services in 1918. The investment in human capital through education and training was a key objective of this institution until its suppression in 1925 after the coup d'état by general Primo de Rivera. The creation of both the FACB and the *Mancomunitat* of provincial councils responded to agrarianist approaches by the sectors belonging to the Catalan nationalist political sphere who fought for higher levels of autonomy for Catalonia<sup>68</sup>.

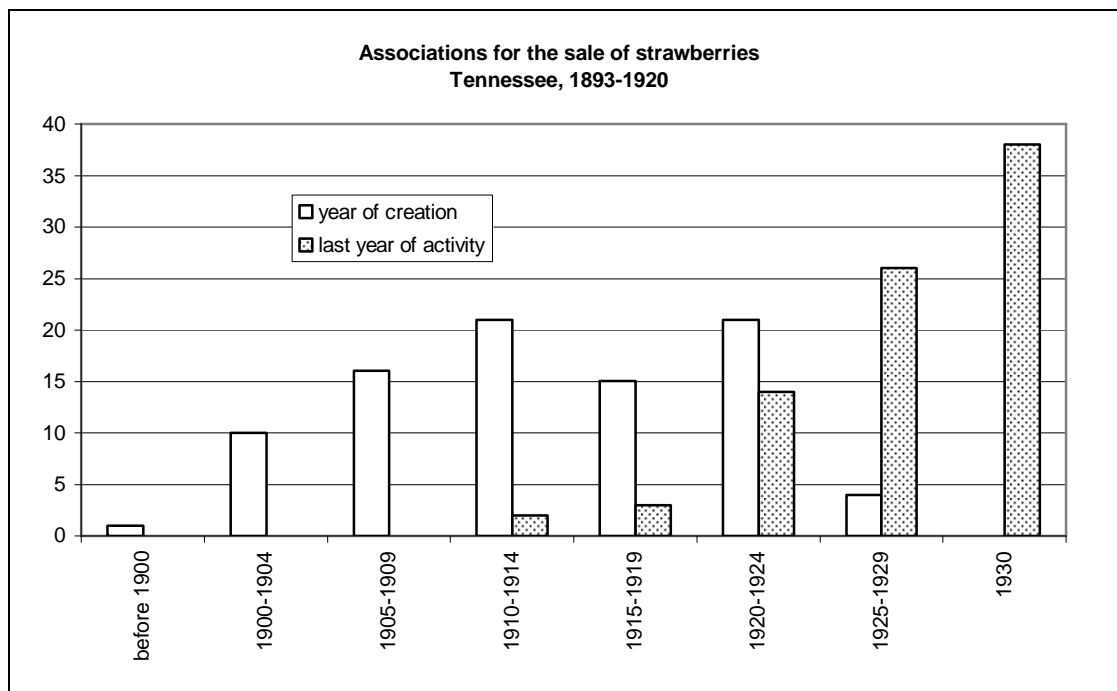
The research carried out by the Higher School of Agriculture was completed through the activities of the various technical services and the creation of some experimental fields<sup>69</sup>. The results were presented through some courses and especially through the publications of the technical services and the conferences held all over Catalonia. A significant number of farmers took part in these conferences. In contrast with the congresses of the Catalan-Balearic Agricultural Federation, where the attendance could oscillate between a hundred and three hundred participants, from among the medium or well-off farmers, in the conferences held by the *Mancomunitat* technical services, the attendance could reach various thousands over a year. As is

logical, the subjects of the conferences were related to the agrarian specialities of the places they were held in. As well as the more technical conferences by the corresponding services, the Agrarian Social Action Service promoted the development of cooperative syndicalism in its own conferences between 1920 and 1923. In 1934, there were 110 syndicates with 16,896 members in the province of Lleida, 148 syndicates and 21,672 members in the Tarragona, 152 and 26,520 in Barcelona and 130 and 13,930 in that of Girona<sup>70</sup>.

During the period under study, neither the state nor the *Mancomunitat* promoted activities aimed at encouraging an interest in agronomic knowledge among children and young people. However, in 1915, the 18<sup>th</sup> Congress of the Catalan-Balearic Agricultural Federation, held in Balaguer, in the western district of the Noguera, passed a proposal for teaching agricultural in schools<sup>71</sup>. The plan proposed in certain details the agrarian teaching to be incorporated from the pre-school level (3-6 years old) to the third level (12-14 years old), also including a night school for adults. The project was designed to be applied in rural schools in Catalonia and the Balearic Islands, the Federation's area of action. The proposal did not get beyond the project stage.

In parallel to the action of the public institutions, cooperation between farmers was developed. Between 1893 and 1905, the California Fruit Growers' Exchange and, from 1912, the California Associated Raisin Company formulated in practice the application of *cooperative marketing*, a system of sales of a single product in which quality of the product was valued, the member had a long-term sales contract and the cooperative experts placed the production on the best market<sup>72</sup>. The activities of the Farmers' Institutes were interlinked with the farmers' associative strategies. As an example, there were the Local Strawberry Associations organized in Tennessee under the influence of the recommendations of the Farmers' Institutes and the action of the associations promoting cooperative marketing.

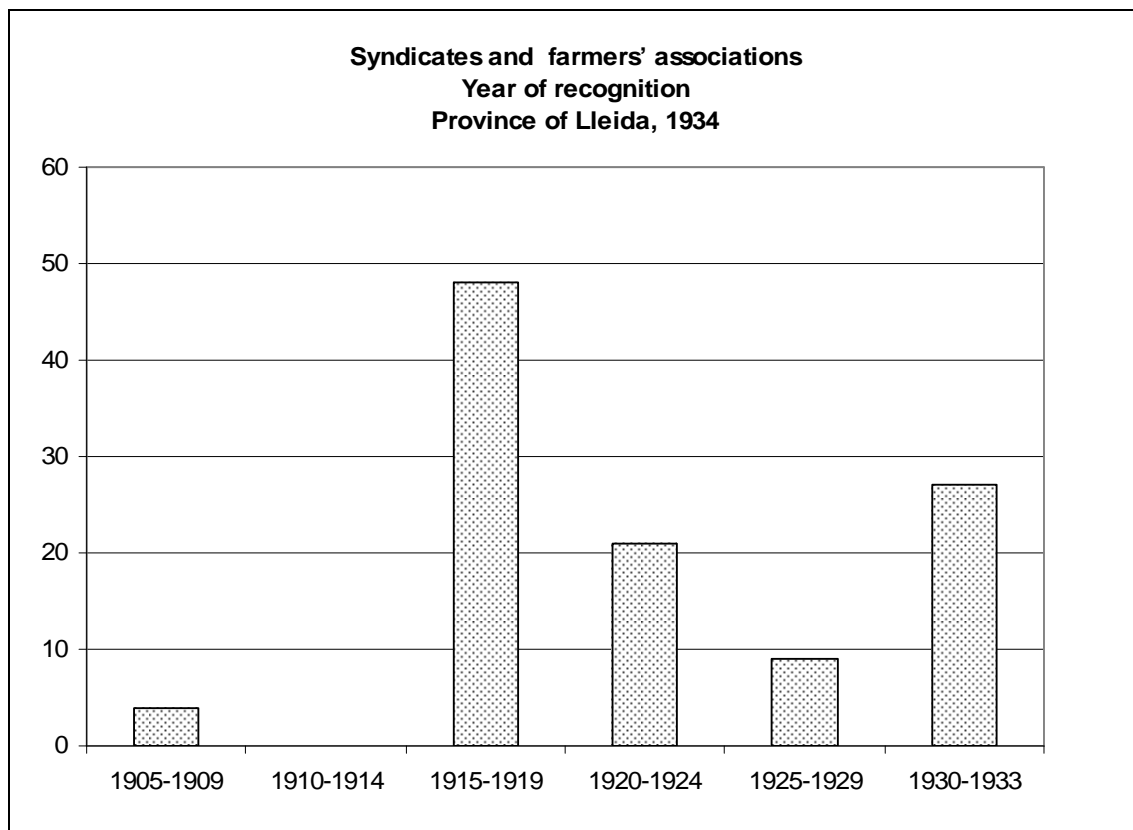
**Graph 2**



Source: *Local Strawberry Associations organized in Tennessee, 1893-1929*, in *Monograph*, 43, pp. 14-15. Agricultural Economic and Rural Sociology Department. Agricultural Experiment Station, University of Tennessee, Knoxville.

In Catalonia, a syndicalism arose that aimed to improve the situation of the peasantry, carry out training activities and create cooperatives, first for purchasing then later, for selling. Graph 3 shows the rate of legalization of syndicates in the province of Lleida. Although the law allowing this was passed in 1906, it was not until the 1915-1919 period that this really got underway. There were no specific associations for each product, although in the wine-producing districts the syndicates created cooperative wine cellars, they built oil presses in the oil-producing areas, and mills in the cereals zones<sup>73</sup>.

**Graph 3**



Source: Ministry of Agriculture. Dirección General de Agricultura, *Censo estadístico de Sindicatos Agrícolas y Comunidades de Labradores*, (Madrid, 1934), pp. 172-180; 392-393.

The education of farmers, in both Tennessee and Catalonia, also had the support of farmers' associations, which allowed improvements in technical-productive methods, with the possibility of increasing production and quality, and the consequent increase in the added value of the product.

### **5. Tennessee and Catalonia: limits and possibilities of growth.**

In both Tennessee and Catalonia between 1880 and 1930 a set of public policies and private actions arose aimed at developing their economies. Although in Catalonia, after the impact of crisis at the end of the century –and that caused by the phylloxera– had been overcome, the peasant economy adapted to the new situation with relative success, the state actions in Tennessee do not seem to have been able to guide the state towards economic development.

It is difficult to evaluate precisely the impact of the investment in education, in human capital through training, as it is a variable that cannot be expressed in variable

index numbers. As Nelson and Phelps have shown, educating part of the peasantry has effects on other peasants, who tend to imitate those advances that show results favorable to the peasant economy. Despite the difficulties for developing agriculture based on science and technical measures –as R.V. Scott has shown–, the tendency we observe in our study is the progressive incorporation –sometimes certainly slowly– of modern agriculture and the agrarian economy into farmers’ practice.

With precedents in East Tennessee since 1870, we see a coincidence in time between the development of the Farmers’ Institutes in Tennessee and the congresses of the Catalan-Balearic Agricultural Federation, first, and later the agrarian extension activities by the *Mancomunitat* of Catalonia. In both territories, farmers’ education was adapted to the necessities of the varied territorial realities. In Tennessee, the state had to play the role of substituting a nonexistent immaterial inheritance that did exist in Catalonia and most regions of Europe. The subjects dealt with in the East, Middle or West Farmers’ Institutes responded to specific problems of agriculture and stock breeding in the area, plus general themes.

As well as education in strictly agronomic or technical questions, it was essential for peasants to learn their real possibilities for development. Two questions were fundamental: the size of the farms and the function of the peasant in the agrarian economy. Regarding the first question, the state of Tennessee set a target of 100-acre farms as the size that could be most viable economically. On the other hand, the Farmers’ Institutes and cooperative marketing contributed to turning the peasant into a professional of production but not of distribution. Cooperative sales had to be done by specialists in commercialization, leaving the peasant to produce quality products. In the Catalan case, with the predominance of small farms, it was essential to incorporate inorganic inputs and trading through the cooperative syndicates.

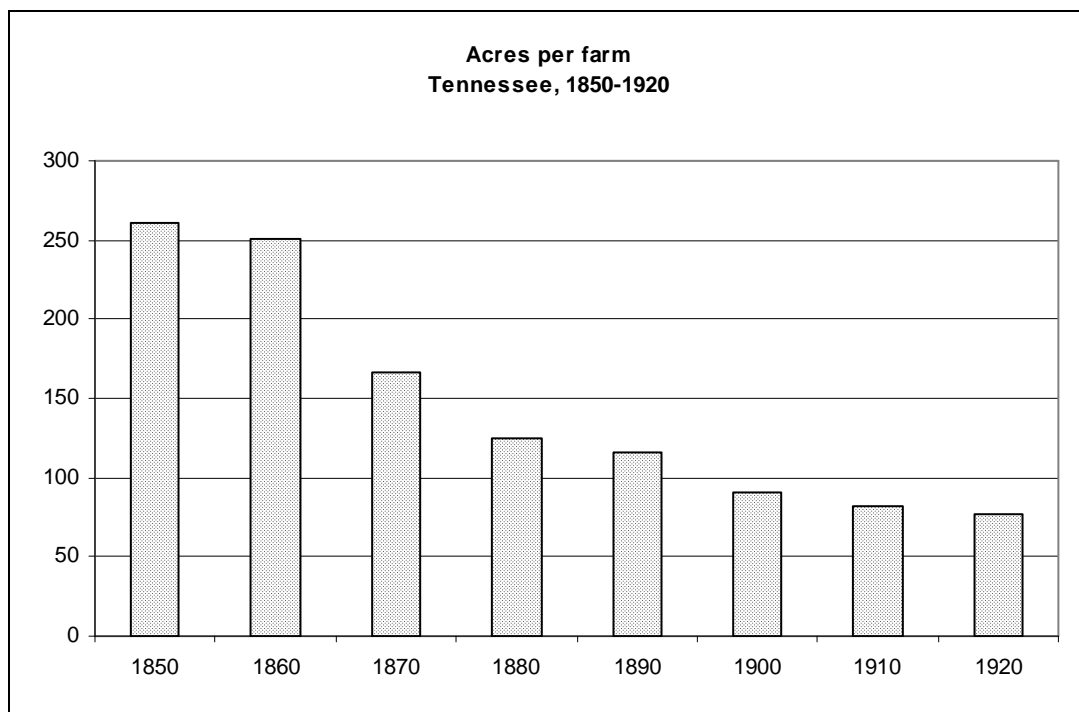
In contrast to Catalonia, the difficulties encountered by the various associations in Tennessee that defended the interests of the peasants to keep going contributed to understanding the limits to the state’s economic growth. The Granges, the Agricultural Wheel, the Farmers’ Alliance, the Farmers’ Union and the Planters’ Protective Association for various reasons –and on occasions by internal conflicts –abandoned their activities relatively soon<sup>74</sup>. The promoters of the Planters’ Protective Association were wealthy families who had a limited relation in the 1880s with the Wheels and Alliances. Over the generations their wealth had been based on slave labor or tenants and sharecroppers. The aim was to obtain better prices for tobacco and facilitate bank

loans for the producers. As happened during the Farmers' Union stage, the problem was not only the low price but also Tennessee's structural problems: the lack of capital and institutionalized poverty.

The extensive state and federal proposals did not bring about a radical change. Van West explains that Commissioner Peck's efforts to attract immigrants to Tennessee in the 1920s were unsuccessful<sup>75</sup> despite the efforts he made to make the state's possibilities known<sup>76</sup>. Some of the obstacles to the development of Tennessee are well documented, but it is necessary to draw up an interpretation that helps to define in greater depth the factors that limited this development, before the crisis of 1929 created difficult circumstances that turned Tennessee into a laboratory for the Roosevelt administration.

Despite the limitations, Tennessee made changes –generally moderate- that we must study. Firstly, the average size of farms was substantially reduced, to the point where it was slightly less than the one hundred acres the Tennessee Bureau of Agriculture had suggested in 1870 as the ideal property to attract smallholders<sup>77</sup>.

**Graph 4**



Source: Prepared from the official censuses. University of Virginia Geospatial and Statistical Data Center. *United States Historical Census Data Browser*. ONLINE. 1998. University of Virginia. Available: <http://fisher.lib.virginia.edu/census/>.

Although production per unit of area was lower in the United States than in the more densely populated areas of Europe, and especially in the places where the agricultural revolution had begun and where this had spread to<sup>78</sup>, the official data for Tennessee show a growth in the production per hectare –and as a consequence of the productivity of work - for certain products. We can highlight a very significant growth in tobacco and wheat, and to a lesser degree, corn. The performance of cotton was practically constant throughout the period. The lines of tendency confirm these observations (see appendix).

The fall in farm size during the period considered was due at first to the deep depression that began in 1893 and lasted until the end of the century and which meant a reduction in owners, because of foreclosures or other types of forced sale. In fact, given the almost total lack of free land on one hand and the fact that many mortgages loans were foreclosed on the other, accentuated the growth in the number of tenants. Many families had to rent land to continue as farmers.

**Table 2. Forms of land holding in Tennessee, 1880-1935**

|                           | 1880  | 1920   |        |       | 1935   |        |       |
|---------------------------|-------|--------|--------|-------|--------|--------|-------|
|                           | total | whites | blacks | total | whites | blacks | total |
| croppers                  |       |        |        | 15.1  | 12.9   | 5.9    | 18.8  |
| share and cash<br>tenants |       |        |        | 26.1* | 23.7   | 3.8    | 27.5  |
| subtotal tenants          | 34.5  | 30.0   | 11.2   | 41.2  | 36.6   | 9.7    | 46.3  |
| part owners               |       |        |        | 7.4   | 7.3    | 0.6    | 7.9   |
| full owners               |       |        |        | 51.4  | 43.6   | 2.2    | 45.8  |
| subtotal owners           | 65.5  | 54.9   | 3.9    | 58.8  | 50.9   | 2.8    | 53.7  |
| totals                    | 100.0 | 84.9   | 15.1   | 100.0 | 87.5   | 12.5   | 100.0 |

Sources: 1880, 1920 and 1935 agrarian censuses. \*17.1 % of farm operators were share tenants, 5.9% cash tenants and in 3.1 % other situations.

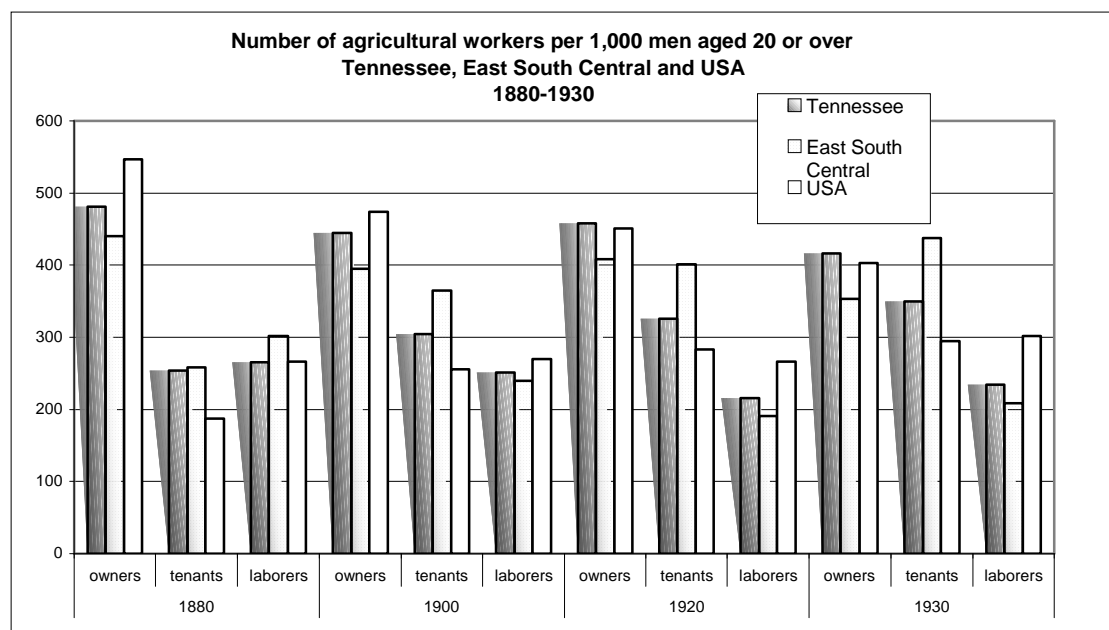
According to data from the US Census, between 1880 and 1920 the percentage of tenants in Tennessee rose from 34.5% to 41.2%, and that of owners dropped from 65.5% to 58.8%. The 1935 data confirm the growth in tenants and the reduction in owners. The periods when the process was most acute were 1890-1900 and 1925-1930. In the first case, this was the result of the deep depression that lasted from 1893 to the

end of the century, and the second case was in the context of the difficulties prior to 1929. This was a general tendency in the United States, although the federal average with regard to tenants was lower than in Tennessee. Compared to neighboring states, Tennessee had a relatively low level of tenants.

One of the situations that could distort the analysis for some official analysts would be that of the sharecroppers. After the Civil War, some ex-slave-owners found themselves short of cash, creating the figure of the sharecropper<sup>79</sup>. This was a black worker who was paid his salary partly in kind. The figure of the sharecropper would guarantee the supply of manpower. Starting from the 1920 census, this figure was differentiated within tenants, but not before. The sharecroppers would not be farm operators, the basic criterion for defining a farm. In fact, the growth in tenants between 1920 and 1930 in the south was due to the increase in sharecroppers<sup>80</sup>. These would be the analyses of the epoch. At the end of this chapter we will present some questions that may enrich the understanding of the role of the sharecroppers.

Graph 5 shows an unexpected reality for Tennessee, given the relevance awarded in the bibliography to the relations between the owners and tenants (including sharecroppers). In Tennessee there was a numerous group of laborers<sup>81</sup> the number of who stayed at a similar absolute numerical level between 1880 and 1930. These employees formed part of the peasant society but under different circumstances to those of the farm operators (owners or tenants).

**Graph 5**



Source: Carl C. Taylor, Louis J. Ducoff and Margaret Jarman Hagood: *Trends in the tenure status of*

*Farm Workers in the U.S. since 1880*, p.9. Mimeographed work. The graph is based on tables 14 (pp. 25-27), 15 (pp. 28-30) and 16 (pp. 31-33).

We have observed very similar tendencies in Tennessee and Catalonia in the sense of the development and consolidation of sharecropping as a form of exploiting an increasingly large number of farms. While the main argument to justify the existence of the sharecroppers was the situation of decapitalization of the *owners* after the Civil War, which implied that the black population joined the workforce on the farm not as employees but as sharecroppers, the reality showed that the growth in sharecroppers would be unstoppable. Initial decapitalization, the end-of-century crisis and finally, hard exploitation despite agrarian progress.

In Catalonia, because of the low prices during the crisis and the high wage levels due to the scarcity of rural assets<sup>82</sup>, the route to agrarian exploitations based on sharecropping was accentuated, involving the sharecroppers in a good part of the production costs.

During the 1880-1920 period, Tennessee farmers invested in improving their properties and applying technology to boost production. The farmed area was maintained –with a slight reduction of 5.6%. The number of farms increased by 50% and the average area fell by almost 40%. Although prices doubled between 1880 and 1920, the value of the farms grew almost fivefold, with an increase of 382.53%; 395.76 in the value of land, fences and buildings; 490.43% in implements and machinery; and 297.52% for livestock on the farms. The total value per farm grew by 215.83, more than 100% above the increase in prices. The value per acre of farm rose by 411.11%.

Table 3

Data for farms in Tennessee, 1880-1920.

|  | 1880        | 1920          | Variation (%) |
|--|-------------|---------------|---------------|
| total acres                                    | 20,666,915  | 19,510,856    | -5.59         |
| total farms (n°)                               | 165,444     | 252,774       | 52.79         |
| Area of farms (acres)                          | 124.92      | 77.19         | -38.21        |
|  |             |               |               |
| value of farm land, fences and buildings (\$)* | 206,749,837 | 1,024,979,894 | 395.76        |
| value of farm implements and machinery (\$)    | 9,054,863   | 53,462,556    | 490.43        |

|                                  |             |               |        |
|----------------------------------|-------------|---------------|--------|
| value of livestock on farms (\$) | 43,651,470  | 173,522,135   | 297.52 |
| total value                      | 259,456,170 | 1,251,964,585 | 382.53 |
|                                  |             |               |        |
| total value per farm             | 1568.24     | 4952.90       | 215.83 |
| total value per farm acre        | 12.55       | 64.17         | 411.11 |

Source: 1880 and 1920 agrarian censuses. \*1920: no fences.

Finally, the improvements in the living conditions and especially food, as shown in the studies by Allred for Tennessee, show how progress affected the quality of life of their inhabitants<sup>83</sup>. Similarly, as we have seen, there was a significant improvement in the nutrition of the Catalans.

With these data from the official censuses, it is difficult to state that nothing changed in Tennessee between 1880 and 1920. Why do the results not mean a significant transformation in the state's historical trajectory? Some limiting factors can give a first response to a key question for understanding the historical transformations in Tennessee.

One of the factors that limited the growth of Tennessee decisively was the crisis at the end of the 19<sup>th</sup> century. Woodward<sup>84</sup> showed decades ago that this depression was longer and deeper in the south. Lester<sup>85</sup> highlighted the insufficient capital for making improvements to the productive fabric –in livestock to meet the urban demands for milk and dairy products, transforming land under tobacco and cotton for fruit and vegetables. The indebtedness of the farmers during the late 19<sup>th</sup>-century crisis was a very heavy burden, as it often meant having to pay real interest rates of 100 or more percent. To pay the interests and pay back the capital, it was necessary to supply double or more of the product than at the beginning of the contract.

The development of overland communications was not up to what could have been expected. In a speech on the 29<sup>th</sup> of March 1914 in the Watkins Hall in Nashville, the 30<sup>th</sup> in the Chattanooga Chamber of Commerce and the 1<sup>st</sup> of April in the Board of Government in Knoxville, M. O. Eldridge defined the subject clearly and offered a solution<sup>86</sup>. Of the 48,989 miles of tracks in the state in 1904, only 8.7% had been improved. Five years later, only 11.7% of the 45,913 miles were improved. The situation was disastrous: 27 counties had no tracks that had been adapted and in 35 counties the figure was less than 10%. It was estimated that adequate tracks would raise the value of each acre of land would grow by between \$2 and 10, reducing the energy

needed for transport. The author explained that sending a bushel of cereal from New York to Liverpool (3,100 miles) cost 2.2 cents, only a third of the cost of transporting the same bushel from a farm to a railhead six miles away.

**Table 4**

The possible impact of improving tracks in Tennessee, 1910

| crop     | production<br>(in thousands) | value<br>(in thousand \$) | total cost of<br>transport<br>(\$) | Saving from<br>improving the<br>tracks<br>(\$) |
|----------|------------------------------|---------------------------|------------------------------------|--|
| corn     | 96,348 bushels               | 53,955                    | 5,395,488                          | 2,697,774                                      |
| wheat    | 10,647 bushels               | 10,434                    | 638,820                            | 319,410  |
| oats     | 4,600 bushels                | 2,116                     | 147,200                            | 73,600   |
| potatoes | 2,400 bushels                | 1,560                     | 158,400                            | 79,200   |
| heno     | 637 tons                     | 8,536                     | 1,274,000                          | 637,000  |
| tobacco  | 64,600 pounds                | 5,426                     | 71,060                             | 35,530   |
| cotton   | 145,973 pounds               | 20,582                    | 145,973                            | 72,987   |
| total    |                              | 102,609                   | 7,630,941                          | 3,915,501                                      |

Source: Eldridge, M.O.: "The road situation in Tennessee", in *Tennessee Agriculture*, volume 4, n° 1, 1915, pp. 20-25.

This is a theoretical saving of 51 %. Although this type of calculation is always risky and complicated to do, it undoubtedly shows that savings in transport could be very large. It must be borne in mind that these products would later be shipped on by rail and, often by water, to their final destination. Saving on transport was fundamental for the farmer, as it was not he who set the prices of the products he sold on the international market.

Given that between 80/90% of the traffic moved on some 15/20% of the tracks, it was proposed to improve 3,647 miles, which added to the 5,353 already done, made up 9,000 miles, 20 percent of the total. The savings in transport would mean that the

cost of the works –\$4,000 per mile- would be paid back in five years. The cost could be assimilated given that Tennessee was the state –with the exceptions of Mississippi and New Mexico- with the lowest taxes, specifically 10.8 cents in each \$100. In any case, these policies of improvement would require the top tax rate of 25 cents per \$100 being raised to 50 cents during these years, and the sale of a certain amount of public debt was authorized up to no more than 10% of the investment. Future maintenance meant a limited obligation for the counties. It was proposed to create a Highway Commission.

What was the impact of all these proposals? We have the results from wide-ranging surveys for 1930<sup>87</sup>.

**Table 5**

Percentage of types of track the farms were located on, Tennessee, 1930

| region   | hard<br>surface | gravel<br>surface | earth surface |                 | others |
|--|-----------------|-------------------|---------------|-----------------|--------|
|  |                 |                   | improved      | not<br>improved |        |
| Northern Mississippi Bottom, Northern and Southern Loess, Northern la Grange, Northern Highland Rim, Central Basin, Eastern Upper East Tennessee Valley. | 9.9             | 25.9              | 19.9          | 38.2            | 6.1    |
| Southern la Grange, Eastern Highland Rim, Lower East Tennessee Valley, West Upper East Tennessee Valley.   | 7.1             | 15.1              | 21.4          | 49.2            | 7.2    |
| McNairy Sand, Western Highland Rim, Northeastern Highland Rim, Cumberland Plateau, Unaka Range.  | 4.4             | 16.5              | 20.0          | 53.4            | 5.6    |

Source: Allred, Ch. E., Hendrix, W.E. & Raskopf, B.D.: Regional Comparison of Rural Standard of Living in Tennessee, Report of 15th June, 1936. Cooperative Plan of Rural Research (Tennessee Agricultural Experiment Station, Federal Works Progress Administration and Tennessee Works Progress Administration). The table is a summary of table 5 on page 19.

These 1930 data seem to demonstrate that the line of action indicated by M. O. Eldridge in 1914 was being pursued very timidly. Two thirds of the farms in zone I, half

of those in zone II and somewhat less than half of those in zone III could send their merchandise along improved tracks, but only on hard surfaces in a few cases. Although there had been progress –with these percentages the situation was surely much greater than that of 1914 when less than 10% of tacks had been improved, there was still a great deal to be done to link all the land in the state under good conditions.

These factors undoubtedly contribute to explaining the difficulties of the rural world in Tennessee. At the end of the 19<sup>th</sup> century and early decades of the 20<sup>th</sup>, Kyriakoudes shows the process of emigration from the rural world of Middle Tennessee to Nashville, which began a process of urban modernization that would transform the southern rural world radically<sup>88</sup>. The fact that the crisis at the end of the 19<sup>th</sup> century affected whites and blacks does not mean that both groups had the same initial social and economic conditions. And in the early decades of the 20<sup>th</sup> century a process of social and economic marginalization of the black population took place throughout the south –including Tennessee.

As we have seen, between 1880 and 1920, the population of Tennessee grew 51.58% while that of the Union grew by more than double that, 110.76%. Tennessee was one of the states with more difficulties to grow demographically, but differentially. While the rate for whites was above the average– 65.61%-, the black population grew by a very limited 12.06 %. Blacks went from making up 26.14% of the state's population in 1880 to only 19.32% in 1920. We think that we must add the social and economic marginalization of the black population to all the difficulties mentioned for the last two decades of the 19<sup>th</sup> century. Woodward titles chapter XIV of his work “Progressivism – For whites only”, in which he explains the aims of the reformers in the first decades of the 20<sup>th</sup> century, when the TDA carried out the ambitious projects described above.

The death rate among blacks was much higher in late adolescence and early adulthood, a lower death rate among blacks at older ages being the result of this prior selection<sup>89</sup>.

Table 6

Death Rates per 1,000, 1917-1928.

|      | Rural |       | Urban |       |
|------|-------|-------|-------|-------|
|      | White | Black | White | Black |
| 1917 | 11.0  | 18.5  | 14.2  | 26.4  |
| 1918 | 12.8  | 21.3  | 20.7  | 33.7  |
| 1919 | 9.8   | 15.4  | 16.0  | 26.5  |
| 1920 | 9.8   | 15.0  | 16.1  | 25.6  |
| 1921 | 8.6   | 12.8  | 13.7  | 23.0  |
| 1922 | 8.4   | 13.0  | 14.0  | 23.7  |
| 1923 | 9.4   | 14.5  | 15.2  | 27.6  |
| 1924 | 8.9   | 14.4  | 14.4  | 30.5  |
| 1925 | 8.6   | 14.2  | 14.1  | 29.1  |
| 1926 | 9.8   | 16.3  | 15.8  | 31.6  |
| 1927 | 8.8   | 14.8  | 15.0  | 28.9  |
| 1928 | 9.5   | 16.8  | 15.4  | 29.8  |

Source: Sibley, Elbridge, *Differential mortality in Tennessee, 1917-1928*, p. 33 (New York, 1969).

A study in a sample of five counties (Madison, Montgomery, Williamson, Putnam and Cumberland), directed by Charles E. Allred in 1923, in the Agriculture Experiment Station at the University of Tennessee in Knoxville, showed a difference between money-lending to whites and blacks. The latter received more loans from individuals and commercial banks, fewer from federal land banks and there were none shown from farm mortgage companies<sup>90</sup>. The same study shows that the average value of mortgaged farms was \$7,695 for whites and \$2,106 for blacks, the value of the loan being respectively 39.6 and 46 per cent of the total value. These data show a much higher value for farms owned by whites and greater level of indebtedness over the value of the farm among black farmers.

The investment in schools by races was favorable to the whites in the 1890-1910 period, characterized by growth in this investment<sup>91</sup>. In 1930, in Tennessee was 7.2 %, well above the 4.3% of the United States as a whole. This figure rose to 9.2% among the rural farm population. By races, illiteracy among native whites was 5.4% in the state

as a whole and 7.4% among the rural farm population, while among the black population the corresponding percentages were 14.9 and 20.1%<sup>92</sup>.

The demographic, economic and educational data show without any doubt that through its theoretically well-orientated educational policies, the social forces grouped into various types of associations, and the action of reformists and progressivists, the state of Tennessee aimed to do the impossible: develop a territory while marginalizing, even allowing the demographic decline, of a black population who, before emancipation, had been one of the pillars on which the southern agrarian economy had been developed.

In both Tennessee and Catalonia<sup>93</sup> a parallel phenomenon appeared: the farmers or the *hisendats* needed to reduce costs. It would be the sectors less favored by historical development –black sharecroppers or white *rabassaires* – who suffered exploitation for the enrichment of the sectors most favored by the development of the agrarian specializations that responded to the development of the urban markets, both in Tennessee and Catalonia. Sharecropping must be treated in a more complex sense than some of the common interpretations (efficiency, non-efficiency, domination, etc.)<sup>94</sup>. It should be contextualized adequately.

At the interpretative level, and against the neoclassic approaches that consider that the sharecropper –in both the USA and Catalonia – was the form that molded best to the competitive markets, a view has been proposed that presents sharecropping in the United States on the basis of the theory of the restriction of possibilities. Thus, it would be neither the ideal for owners nor slaves, who aspired to own land. However, this formula gave them a high degree of independence<sup>95</sup>. This interpretation moves away from approaches like those of Alston and Kauffman, who consider that the higher level of monetary income paid by the blacks compared with the whites was not the result of a classic exploitation, but rather the price to pay for services that the blacks received from the white patrons, to distance them from the scars left by slavery<sup>96</sup>.

In Catalonia, the *rabassaires* freely organized their wine-growing exploitations, a freedom that does not seem to have existed in Tennessee. In Catalonia, Garrabou, Planas and Sagner<sup>97</sup> develop an interpretative line that places sharecropping in the setting of specific historical contexts and specific solutions, to which the backwardness in the agrarian world could not easily be attributed.

Whatever the assessment of sharecropping, what the blacks wanted was to have properties that allowed them to maintain an acceptable standard of living. It could be

true that sharecropping gave the black farmer more independence, in contrast with working as an employee. If the contract was renewed, he could act as a head of family who incorporated the family work into that of the farm<sup>98</sup>. Other authors have argued the opposite: sharecropping, through the year-to-year, facilitated the mobility of the black farmer in search of better lands, bigger incomes, more honest landlords, etc.<sup>99</sup>. Ranson and Sutch<sup>100</sup> highlight that, for contemporaries, sharecropping was inefficient for improving and intensifying the land, given the invariable agrarian practice of the annual contract. The owner had to be aware of what the sharecropper was doing. For Engerman, as we have seen, this was not a contract with a previously established income, but was rather more a remuneration that depended on the harvest, and that was controlled by the owner.

Moreover, as we have seen above, in Tennessee there was a strong presence of laborers, of employees. Although in Catalonia the small landowner, who was in turn an exploiter, predominated, the experience of Tennessee (with reliable data) leads us to think that perhaps a shortage of sources in Catalonia may have reduced the role of the employees. In two important towns in agrarian Catalonia –Lleida and Balaguer- there were important groups of landless employees –as well as the small-scale peasants who also complemented their income working for a wage and who were undoubtedly of great importance<sup>101</sup>.

In contrast with Tennessee, Catalonia is a country that has undergone agrarian and industrial economic growth since the 18<sup>th</sup> century, building an advanced economy in Spain and Europe, known at one time as “little England”<sup>102</sup>. With an integrated home market and vigorous foreign trade, growth was an achievable target<sup>103</sup>. Despite strong social divisions in the farming world<sup>104</sup>, the existence of a middle peasantry able to take advantage of the opportunities the market offered explains why cooperativism was able to progress and that the proposals from the ruling classes in the agrarian world had a significant impact. Overcoming the end-of-century crisis, the development of new irrigated areas and agrarian industries generated an economic dynamism, only interrupted by the Civil War and the Franco regime. During the first decades of the 20<sup>th</sup> century, mineral and chemical fertilizers and the new technologies were incorporated<sup>105</sup>.

Although the extent of primary and secondary education was very limited, the actions by the *Mancomunitat* of Catalonia, were spread –through notebooks and seminars- all over the land, adapted to each county’s agrarian specialization, and without any discrimination. The success was possible given that, there being knowledge

of the best agrarian practices among the peasants (“*a uso y práctica de buen payés*” was the formula that referred to this non-material heritage), the *Mancomunitat* and, from an earlier date, the publications of the Catalan agrarian patronal in the Catalan Agricultural Institute of Sant Isidre and the congresses of the Catalan-Balearic Agricultural Federation contributed to adapting the traditional practices to the knowledge of the new agriculture and livestock<sup>106</sup>.

There is little doubt that, with better distribution of land and wealth, development of Catalonia could have been even stronger. But this limit to growth had a much smaller impact than the effect in Tennessee of the marginalization and pauperization of the black population, who had made such a great, although forced, contribution, to the development of the United States prior to 1865.

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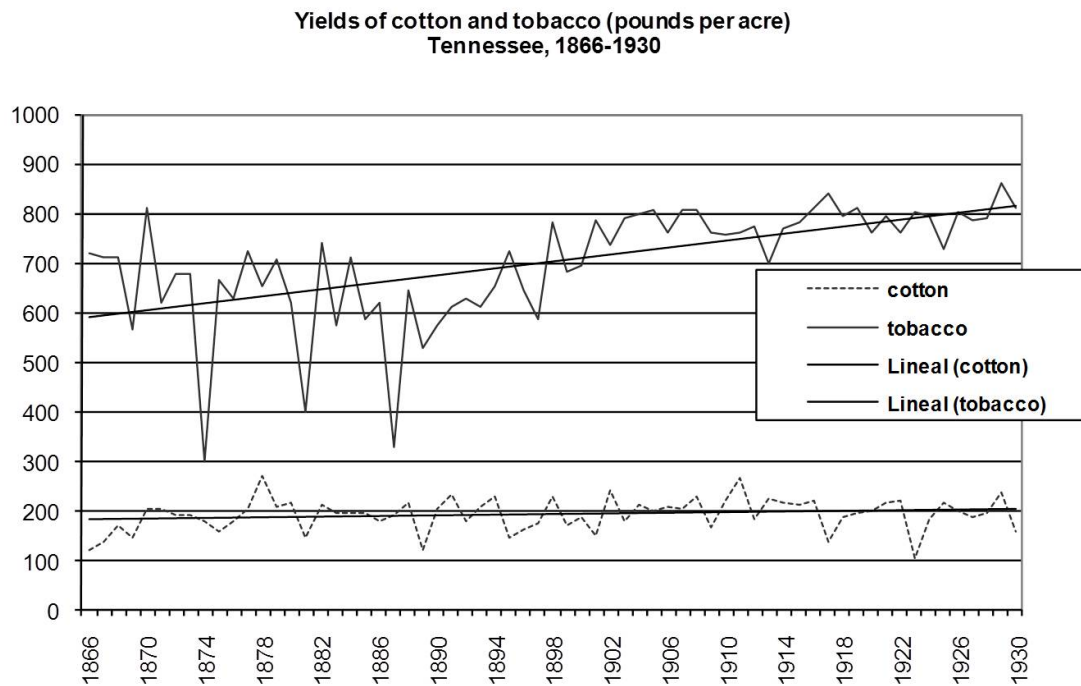
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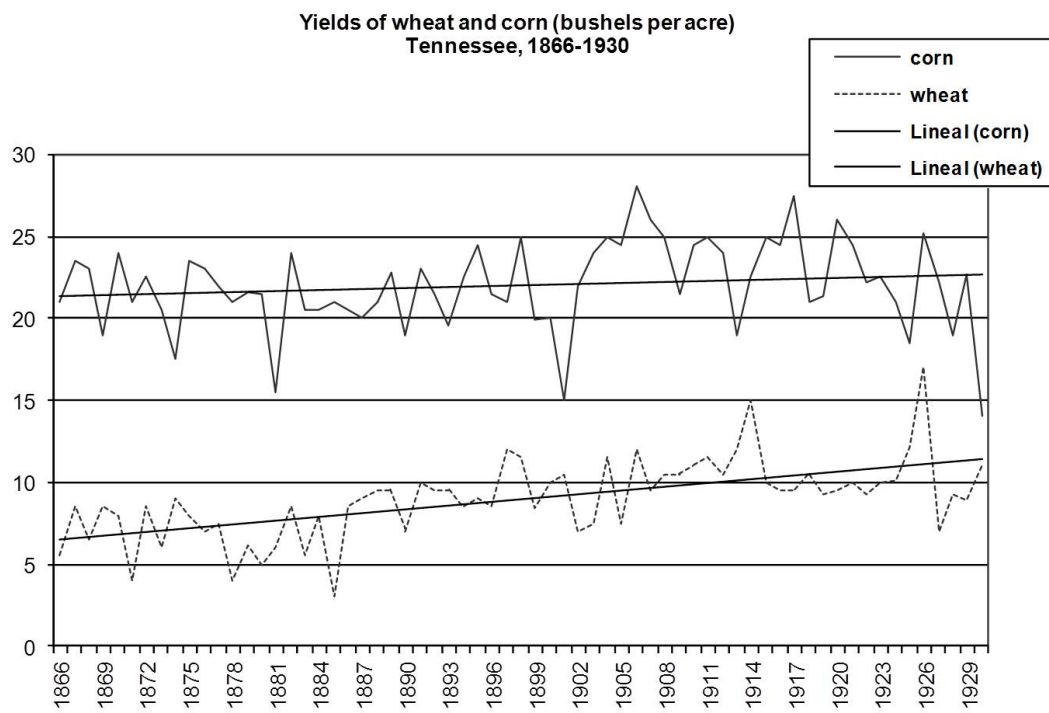
## Appendices

**Graph 6**



Source: Author from S.T. Marsh, G.D. Collins, Jr. and S. W. Skinner (1948): *Agricultural Trends in Tennessee* issued by Department of Agriculture, Statistical Service, pp.12-13; 19, Nashville, in collaboration with the U.S. Department of Agriculture.

**Graph 7**



Source: Author, from Marsh, Collins, and Skinner, *Agricultural Trends in Tennessee*, pp. 28-29; 31-32.

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<sup>9</sup> 'In the 19<sup>th</sup> century, the participation of government in the total reproducible wealth of the United States, or the government's public income, were always a minimal percentage of the total reproducible wealth or national income, respectively. Approximate estimates indicate that in the 19<sup>th</sup> century this figure did not exceed 5 percent of the total'. North, D. C., *Growth and welfare in the American past: a new economic history* (Englewood Cliffs, N.J., 1966). [Translate from the Spanish edition (Madrid, 1969), p. 111)].

<sup>10</sup> Gardner, B. L., *American Agriculture in the Twentieth Century* (Cambridge-London, 2002), p. 184.

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<sup>13</sup> 'Proceedings of West Tennessee Farmers' Institute, 1899', p. 178.

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<sup>22</sup> The information in this section is from various publications in the state of Tennessee that are cited in this work. For the origins of the New South, see Woodward, V. *Origins of the New South, 1877-1913* (Baton Rouge, 1951).

<sup>23</sup> This replaced the Bureau of Agriculture created in 1854 and that had a very limited impact owing to the effects of the civil war.

<sup>24</sup> Although it was not called Tennessee Department of Agriculture until 1923, we use this name throughout the period, given that it is used to catalogue all the publications of both the Bureau and the Department, and it is used very frequently in the department publications.

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<sup>28</sup> Table 1. United States - Race and Hispanic Origin: 1790 to 1990 [[www.census.gov/population/www/documentation/twps0056/tab01.xls](http://www.census.gov/population/www/documentation/twps0056/tab01.xls)]; Table 57. Tennessee - Race and Hispanic Origin: 1790 to 1990 [[www.census.gov/population/www/documentation/twps0056/tab57.xls](http://www.census.gov/population/www/documentation/twps0056/tab57.xls)], in Campbell Gibson and Kay Jung, *Historical Census Statistics on Population Totals By Race, 1790 to 1990, and By Hispanic Origin, 1970 to 1990, For The United States, Regions, Divisions, and States*, Population Division, U. S. Census Bureau, Washington, DC 20233, September 2002, Working Paper Series No. 56 [<http://www.census.gov/population/www/documentation/twps0056/twps0056.html>].

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<sup>33</sup> Cochrane, W.W., 'Prosperity and Depression', in Cochrane, W.W., *The Development of American Agriculture*, pp. 99-121 (Minneapolis, 1993).

<sup>34</sup> For example, the Junta Consultiva Agronómica, *Avance Estadístico sobre cultivo y producción de la vid en España*.

<sup>35</sup> Caminal, M., 'La fundació de l'Institut Agrícola Català de Sant Isidre: els seus homes i les seves activitats (1851-1901)', *Recerques*, 22 (1998), pp. 117-135.

<sup>36</sup> Hamilton, J., *Farmers' institutes in the United States*, United States Office of Experiment Stations (Washington, 1904).

<sup>37</sup> Vilar, P. (dir), *Història de Catalunya*, v. 7.

<sup>38</sup> Planas, J. & J. Capdevila, 'La Cambra Agrícola de Maldà (1891-1900): primeres aportacions?', Busqueta, J.J., Barrull, J. and E. Vicedo, eds., *Solidaritats pageses, sindicalisme i cooperativisme.*, pp. 451-474. (Lleida, 1998).

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<sup>40</sup> Garrido, S., *Treballar en comú. El cooperativisme agrari a Espanya (1900-1936)*. (Valencia, 1996).; idem, "El cooperativismo agrario español del primer tercio del siglo XXZ, *Revista de Historia Económica* (1995), XIII, 1995, v.1, pp. 115-144; idem, "Why Did Most Cooperatives Fail? Spanish Agricultural Cooperation in the Early Twentieth Century", *Rural History* (2007), 18, 2, pp. 183-200.

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<sup>41</sup> Saumell, A., *Viticultura i associacionisme a Catalunya: els cellers cooperatius dels Penedès (1900-1936)*.

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<sup>43</sup> Clarke, *Regulation*, p. 33. Gardner, *American Agriculture*, pp. 176-249.

<sup>44</sup> *Biennial Report of the Commissioner of Agriculture 1899-1900*. At a general level, see Hamilton, J., *Farmers’ institutes*; Haidem, *Farmers’ institutes and agricultural extension work in the United States in 1913*, USDA (Washington, 1914). Purdue University, Dept. of Agricultural Extension, *The farmers’ institute as a factor in rural education* (Lafayette, 1918). Among the most dynamic was the Illinois Farmers’ Institute, with publications that had a large circulation. A history of public action, especially educational, in the United States is offered with full details, in Scott, R.V., *The reluctant farmer. The rise of agricultural extension to 1914*. (Urbana, 1970). The development of agrarian extension for the southern black population is analyzed in Wayne, J., ‘Black agricultural extension agents and the politics of negotiation’, in Hurt, R.D., *African American Life in the Rural South, 1900-50* (Columbia, Missouri, 2003), pp. 152-188.

<sup>45</sup> *Biennial Report of the Commissioner of Agriculture 1899-1900*, p. 17.

<sup>46</sup> ‘Proceedings of the Twentieth Annual Sessions of the East Tennessee Farmers’ Convention’.

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<sup>51</sup> 'Work of the Boys' Corn Clubs', talk presented by the judge Robert Ewing, Chairman Agricultural Committee, of the Nashville Board of Trade. *Proceedings of the Middle Tennessee Farmers' Institute, Twelfth Annual Convention, 21-23 October 1913*, in *Tennessee Agriculture*, vol. 2, n° 11, (1913), pp. 540-3.

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- <sup>72</sup> Steen, H., *Coöperative Marketing. The Golden Rule in Agriculture*. (Garden City/New York, 1923); Gatlin, G. O., *Cooperative Marketing of Cotton*, United States Department of Agriculture, Department Bulletin, 1392 (Washington, 1926).
- <sup>73</sup> See, for example, the strategies of the cooperative wine cellars in Saumell, *Viticultura*.
- <sup>74</sup> Lester, C. L., *Up from the Mudsills of Hell*.
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- <sup>76</sup> The promotion of immigration was a key aspect of the meetings of the Farmers' Institutes. For example, see Brandon, J.S., 'Is immigration into our southland desirable? West Tennessee Farmers' Institute, in *Biennial Report*, (1899-1900), pp. 184-7.
- <sup>77</sup> Tennessee. Dept. of Agriculture: *Biennial report. Nashville, Tenn. First and second reports of the Bureau of agriculture. Introduction to the resources of Tennessee* (1872-1874).

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<sup>78</sup> Slicher van Bath, B., *The Agrarian History of Western Europe*. (London, 1966).

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<sup>80</sup> Number of the different situations per 1,000 men aged 20 or over.

|                    | 1920                                   |               | 1930                                   |               |
|--------------------|--|---------------|--|---------------|
|                    | tennants<br>(without<br>sharecroppers) | sharecroppers | tennants<br>(without<br>sharecroppers) | sharecroppers |
| USA                | 220                                    | 63            | 211                                    | 84            |
| South              | 251                                    | 133           | 234                                    | 176           |
| East South Central | 247                                    | 154           | 233                                    | 205           |

Source: Carl C. Taylor, Louis J. Ducoff & Margaret Jarman Hagood: *Trends in the tenure status of Farm Workers in the U.S. since 1880*, p.9. Mimeographed work.

<sup>81</sup> The 1872-1874 *Biennial Report* refers to the distrust of black manpower and the inclusion of white workers in farming work in some parts of Tennessee.

<sup>82</sup> Garrabou, R., Pujol, J & Colomé, J, Saguer, E., “Estabilidad y cambio de la explotación campesina (Cataluña, ss. XIX y XX), in R. Garrabou (ed.) *Propiedad y explotación campesina en la España contemporánea*, (Madrid, Ministerio de Agricultura, Pesca y Alimentación, 1992).; Garrabou, R., Planas J. & E. Saguer, Un capitalisme impossible? La gestió de la gran propietat agrària a la Catalunya contemporània (Vic, 2001); Giralt and Garrabou, dirs, Segles XIX i XX.

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<sup>84</sup> Woodward, C. V. *Origins of the New South, 1877-1913*.

<sup>85</sup> Lester, Connie L., *Up from the Mudsills of Hell.*, pp. 246-7.

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<sup>90</sup> Origin of mortgages according to receivers, Tennessee, 1923

|                         | white | colored |
|-------------------------|-------|---------|
| Individuals             | 53.6  | 66.1    |
| Commercial banks        | 7.2   | 16.7    |
| Federal land banks      | 21.6  | 17.2    |
| Insurance companies     | 10.6  | -       |
| Stores                  | -     | -       |
| Farm mortgage companies | 7.0   | -       |
| Total                   | 100.0 | 100.0   |

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<sup>91</sup> Wright, G., *Old South, New South*.

<sup>92</sup> ‘Chapter XXVIII - Illiteracy, Reading habits and libraries’, Allred, C. E., *Monograph*, 81, pp. 442-446.

<sup>93</sup> Garrabou, R., Planas, J. & Sagner, E., “Sharecropping and the management of large rural estates in Catalonia, 1850-1950, *The Journal of Peasant Studies*, vol. 28 (2001), 3, pp. 89-108. Garrabou, R., “Derechos de propiedad y crecimiento agrario en la España contemporánea”, in S. De Dios, J. Infante, R. Robledo & E. Torijano, ( , eds.), *Historia de la propiedad en España. Siglos XV-XX*. (Madrid: Centro de Estudios Registrales, 1999), pp. 349-370.

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<sup>98</sup> Wright, G., *Old South, New South.*, p. 94.

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<sup>99</sup> Kyriakoudes, *'Lookin' for Better All the Time*.

<sup>100</sup> Ranson, R. L. & R. Sutch, *One Kind of Freedom. The Economic Consequences of Emancipation*, pp. 99-104, (Cambridge, 2001).

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