

Agricultural Holdings - Their Disintegration and Re-union into Economic Units.

By

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The desire to possess land is one of the most ancient and deep-rooted instincts of mankind. It can be traced back to days when primitive man was a cave-dweller and possessed a small patch of land near by on which he perhaps grew a small patch of grain to support himself. As he advanced in civilisation and went through the pastoral and then the agricultural stages, the passion for the possession of land also became deeper and deeper. Till a settled Government under a strong chief developed and laws were evolved to keep order between man and man, this land hunger often proved to be the cause of strife between individuals and sometimes between neighbouring tribes. In fact the history of mankind is in great part a record of a series of conflicts of nations warring for the possession of land. Till recent times in new countries like Australia, Canada or the United States of America vast stretches of land lay unexplored and unoccupied so that men with a spirit of adventure and enterprise were free to enclose and own as much land as they could cultivate without hindrance save when their activities came into clash with those of their neighbours. In old established countries, however, this impelling force has suffered a strong check, since population has increased and all land has been occupied. In fact, by reason of the development of a surplus population and owing to the fact there are no other channels or occupations into which the attention of this surplus could be diverted from land, a disintegration has naturally set in. This is most in evidence in old non-industrialised countries like India where agriculture is still considered the premier industry.

Several factors contribute to the parcelling out of existing areas. Some of these physical, religious, social or economic, operate as a check to a greater extent in certain countries than in others. Nevertheless, trouble arises when a nation becomes too large for the area it commands. It is then driven to exercise its brain better, to become more resourceful, to overcome obstacles. It then puts forth efforts to expand beyond its confines in various ways, viz., commerce, peaceful penetration, spheres of influence, lowering of its standards

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of living, exploitation, emigration, colonisation, diplomacy or war. Else it has to perish in the struggle; it gets wiped out of existence. One or more of these causes may singly or in combination be at work in any one country during a given period. Most economists are now veering round to the view that the last world war which killed ten million souls and crippled several millions more, was really brought about by problems of over-population and not by the assassination of the Austrian prince at Serajevo, nor through the perfidy of the German Emperor.

In agricultural countries, as local conditions permit, all land under occupation is divided up among actual workers or those who make investments towards reclamation. Modern Russia is an instance in point. In that country, since the extinction of the Romanoffs, the land owners have had bad days and the proletariat has ruthlessly split up the land. A worker in the above circumstances would be naturally content with the area he has reclaimed or can possibly work singly. This would be his holding. This is in the main the underlying frame work of every holding. Yet, in particular tracts other causes supervene and invest a holding with definite distinguishing characters. An economic holding may therefore be defined as the extent of land which enables the operator to make a living out of it, which enables him to keep his family, his children and himself in comfort, in any event, above want. This of course implies that he would find enough work for his animals and keep the machinery, if any, in working order and good repair. The size of such an economic holding will vary with the conditions obtaining in any particular tract, and with the skill and the status of the operator.

A few illustrations will make our meaning clear.

(a) The area covered by the Ceded Districts in the Madras Presidency is several millions of acres. This area receives comparatively little rainfall, the average never exceeds 20 to 25 inches in any year. Very often it fails. More often there is scarcity. Cotton alternates with grains. The acre-yield of the latter oscillates somewhere about 500 lbs. The country is sparsely populated and the average area a ryot cultivates is about 47 acres.

(b) Take again another instance. Towns like Madras, Trinopoly, Madura, Tanjore, Tinnevely, Calicut, Cuddapah and Bellary now boast of a large urban population. They are characterised by higher standards of living and need very large amounts of milk, butter and ghee, tons and tons of vegetables, fodder and flowers, and carloads of fruits and grains and thousands of unskilled labourers,

The lands in the immediate vicinity, therefore, are devoted to the production or supply of these requirements. Intensive cultivation becomes the rule, and very small areas do service. An acre or two are more than sufficient to keep the cultivator engaged.

(c) Cultivation in the deltaic tract is an example of a third type. Take any village in the deltas of the Godavari, the Cauveri or the Tambraparani. Here there is very little of dry land and still less of garden land. Whichever side you turn you see only wet lands. These grow mostly one crop a year and that, the very same crop throughout. It is sown, transplanted and harvested almost the same time over the whole village. At other periods of the year, the land is idle, the animals are idle and the men are idle. In these circumstances an average farmer can cultivate no more than 3 or 4 acres.

(d) In the Noyyal valley of the Coimbatore District, for example—a valley not blessed with a wide expanse of wet lands,—dry, garden and wet lands are contiguous to each other. Here a ryot can own all the three classes of land and work from block to block throughout the year as season permits and his cropping needs. An average ryot can deal with ten to twelve acres, which he finds ample. In a similar way, sugar-cane, betelvine, plantains, turmeric and jute (local) would reduce the area to which a man can turn his attention without any deterioration in the standard of living.

Jack gives an apt illustration in his "Economic life of Bengal District" page 85. He observes "50 years ago the cultivator in Eastern Bengal grew the whole of his food upon his own land and if his land was not adequate for this purpose worked as a hired labourer in harvesting for others and obtained his wages in kind. Since the introduction of jute, some of the cultivators have given up the growing of their whole food on a calculation that it would be profitable to grow jute and buy grain."

These are examples from our own country. Other circumstances necessitate other treatment. An American farmer generally keeps a tractor, a drill, a harvester, a thresher and other agricultural machinery. For, there, human labour is scarce and animal labour is costly. The tractor ploughs 5 to 10 acres a day. He can use the drill and sow fifteen to twenty acres daily. Corn on an area of ten to fifteen acres can be cut with the harvester and his thresher at comparatively less expense, separates out the corn from the straw, winnows and bags the grain and in fact deals with the produce of large areas cultivated in the season, in a very short time. This equipment renders the cultivation of large extents of land possible and is necessary if his

crops should pay for the expenses. Any thing less than sixty to one hundred acres would not be economical in his case. In Madras a few jacks, mangoes, oranges and limes gladden the heart of a cultivator but often bring him sorrow if the blossoms happen to fall or the fruits are damaged. When an insect attacks them he gives it up in despair, and the pest continues to thrive, whereas an Australian or American fruit grower will not rest content with less than one hundred acres of orchards and his equipment to destroy pests may be with power-driven sprayers or with insecticide-broadcasting aeroplanes. The outlay involved in the two cases and the profits expected determine the extent of the garden each owner can operate.

The extent given above of an economic holding is, it is fair to assume, only ideal. The actualities are different.

Table No. 1.

Country.	No. of occupiers of 50 acres and less in lakhs.	No. of occupiers of land over 50 acres in lakhs.
Germany. 1904.	45.2	2.8
Austria.	26.9	1.7
United States of America.	19.3	38.0
Great Britain.	3.4	1.7
Ireland.	5.1	0.9
Belgium.	8.1	0.2

From the above it will be seen that the number of occupiers of land cultivating areas falling far short of what would be an economic holding, varies in different countries.

The case is infinitely worse in our country. Over 80 per cent of the population depend upon land. We have very few industries to boast of. Every census shows an increase in population. There is no outlet for the surplus. The small number of emigrants to the colonies and other parts of the Empire are but a mere fleabite compared to the total population.

Further disadvantages arise when the area cultivated by one man is not all in one block but is scattered all over the locality. This is not an evil peculiar to India alone. It is in existence in all old countries, but tends to accentuate when no remedial measures have been taken. In India, the law of inheritance which is in vogue amongst the Hindus who form the bulk of the inhabitants is tending

to accentuate the evil. In other countries the process of division of land does not go so rapidly as here where the legal right to equal division of property amongst the sons of the same father has tended to hasten disruption almost beyond repair. Mr. Orwin, the noted Agricultural Economist has in this wise calculated the waste involved in human labour alone in farms of different size.

Table No. 2.

Groups in acres.	Average size of farm in acres.	Average men per acre.
0 - 50.	39	7.1
50 - 100.	78	6.4
100 - 150.	138	4.2
150 - 250.	201	3.3
Over 250.	356	2.6

The above decrease in labour with the increase in size of farms adds to the difficulties of an owner of bits of land distributed in several places. It has been recorded that in one village Vengampatti, Salem District a seven-acre field was sub-divided into eighteen pieces and owned by five pattadars. One pattadar owns 42 cents in five places and another 1.78 acres in nine places. In Mukutha-palayam 37 pattadars own amongst themselves 166 cents of land with an assessment of only Rs. 4-10-0. In Pimplasavadagar in the Poona District for a total area of 787 acres of land the number of plots is 729. Of these 463 are below one acre and 148 are between one and two acres. It is manifest that cultivation on such small areas would not be profitable. It entails considerable waste of time, lack of efficient supervision or the employment of more hands. Digging of wells is not possible; a conversion of dry into garden lands is unthinkable nor an increase in production. It implies the existence of innumerable bunds, waste of much land for carrying channels to several plots. It necessitates the creation of facilities for passage for owners to different plots. It brings on constant disputes about the location or shifting of boundaries. It increases the number and cost of boundary stones, length and maintenance of fences. Inability to introduce improvements by carting silt, enclosure, or draining, results. No change of crops can be contemplated unless all the owners agree. Rotation is impossible nor are improvements of any kind in the shape of growing a green manure crop, like daincha, a money crop like sugar-cane, turmeric or cotton, a fodder crop like lucerne or Guinea grass. Either the whole village has to take it up or the innovation fails. This leads to stagnation in agricultural practices even when

considered desirable and no improvement is adopted. With a full knowledge of the circumstances the farming community suffers and the country does not prosper. If, on the other hand, small packets of land instead of being maintained intact amongst several hundreds of cultivators, be clubbed together into bigger lots, the same number of occupiers would find them more profitable and less expensive. More land will be brought under cultivation. There will be fewer bunds, fewer channels, less litigation, better manuring more crops and diversified cropping. This would result in greater production, and efficiency in production. Serious thinkers and statesmen in all countries have devoted their attention to the solution of this pestering problem and adopted several ways. In America, it has not reached an acute stage though there are indications tending in that direction. In Europe since the time of Napoleon, attempts have been made to bring about wholesome changes. To point out one instance, Sweden took up the question of the re-union of lands into larger lots several years ago and has been steadily working at it with the following result.

Table No. 3.

Revision of lands in periods of ten years.

Year.	[Landholders.		Lots of land		Reconstituted Hectare per holder.
	Residing in valley.	Compelled to quit.	Total.	Average	
1841 - 1850	35,668	19,830	113,624	2	52
1891 - 1900	14,126	3,374	34,095	1.9	149
1828 - 1905	178,541	80,444	436,178	2	71
(Hectare equals 2.47 acres.)					

Nearly one-third or 80,000 peasants with their families quitted the village to go and live on the lands re-united in larger lots. In the East, Japan also has taken up this question seriously and we may expect similar results to follow. In India the very unsatisfactory nature of the division of land was first brought to the notice of the public and Government by the Famine Commission and more recently in a very forcible form by Dr. Keatinge about 1910 when he was the Director of Agriculture, Bombay. This subject was discussed by the Board of Agriculture more than once and formed subject of serious consi-

deration, by the Governments of Madras and Bombay where the evil is most acute. In India besides the law of inheritance and other natural causes which are at work elsewhere, several other factors contribute to the perpetuation of this evil and its further accentuation. (a) Construction of rail roads and canals and distributaries divides up plots of individual owners and throws them on opposite sides, (b) During the past quarter of a century or two owing to the rapid communication and dispersal of world ideas, labour has become restless, demands better comforts, less working hours, higher wages and greater freedom from control. A tendency has thus become manifest in certain important localities like Anakapalle, Katpadi, Cuddalore and Tuticorin where a fairly large amount of labour has accumulated for it to give up cultivation of land as such but take it up as an adjunct with other occupations. Small tenants approach land owners with requests for parcelling out small lots for cultivation and pay higher rentals. Under this system they become their own labourers, and realise in the produce obtained the accumulated wages of idle days. In their spare time they take up small contracts, work as labourers when wages are high. I have known several instances at Anakapalle in Vizagapatam District and Amalapur in Godavari District where this condition has accelerated the process of sub-division of land. In Anakapalle which is a busy commercial centre there are several small owners of land round about the Government Farm. They cultivate generally half acre lots dividing them up into plots for sugar-cane, root crops, sweet potato, vegetables, etc. These they cultivate in their spare time and they otherwise busy themselves with small contracts on rail roads, in the local jaggery market and in the factory. At Amalapur there are several small cultivators who, in spite of paying high rentals on small paddy fields, are satisfied with their production; for they get enough grain for food and fodder for an animal or two they maintain which they utilise for running single-bullock carts for hire which pays for the rental and their other expenses for clothing, festivals, etc. Yet others in the Godavari delta engage themselves in purchasing grain and other articles of merchandise, transporting them in boats on the canals, selling them in Rajahmundry and other towns and in bringing back necessities of life saleable in villages. Similar circumstances are, I am sure, not uncommon in most other parts in this country.

Land tenures in India are peculiar and have produced their effects on the sub-division of land. The Zamindar in the permanently settled tracts and the absentee landlord under the ryotwari tenure are not interested in consolidation of holdings. The small tenant and the labourer are equally indifferent because of the advantages of terms they are likely to wring out from the owner or employer. The owner-occupier is the real sufferer. Perhaps he is not found in same numbers in all the districts; but the State is the worst affected as the

total production of the country suffers considerable diminution through the wasteful methods of agriculture and impediments to improvements in the agricultural condition of the people. An insect pest or fungoid disease may devastate hundreds and thousands of acres while both the producer and the consumer simply look on with dismay and find no solution.

Elsewhere various methods have been suggested or adopted to bring about improvements in re-union or consolidation of existing lands. Some of these are the following :—

(a) The State engages the staff employed to re-unite lands and pays them.

(b) Transactions in connection with the transfer and re-alignment of lands are in several countries exempt from stamp duties.

(c) When a substantial majority varying with local conditions express a desire to have consolidation introduced into their village, a refractory minority or group of individuals is through a legislative enactment compelled to yield to the course suggested by the majority.

(d) Prior encumbrances, mortgages etc., are through legislation equitably adjusted without any hardship to the parties even when the lands concerned are re-stripped.

In the Madras presidency voluntary exchange of lands and the consequent alterations of entries in registers permitted by Government in Trichinopoly District at the time of the last settlement proved a failure as parties could not come to any satisfactory settlement. In the Punjab Mr. Calvert reports that satisfactory results have been achieved in his attempts at consolidation in 1920-21. The practice now exists that Government under the land Acquisition Act in this country purchases lands for Municipal corporations, important industrial concerns and such like bodies and hands them over at almost the nominal cost. These are again sold for house sites, factories are built on them and thus the fabulous prices which will be put up by individual owners at the start disappear to the general good of the community. In the same way it would be advantageous in addition to the four circumstances above named, if Government would exercise its powers under the Land Acquisition Act, buy and hand over to people, desirous of consolidating their holdings, small plots which are located in their midst and owned by people who are troublesome. It is not of course meant that this benevolent provision should be extended in the case of absentee landlords or Zamindars.

I have in the short sketch given above purposely refrained from entering into details which are of a purely local nature. Conditions are bound to vary from country to country and from tract to tract. I have therefore attempted a general indication of the malady and of its manifold ill-consequences tending to arrest the progress of the country, solely with a view to focus your attention on it. I have considered it enough to bring this subject to this enlightened body of Scientific Agriculturists though it has been discussed in the press and on the platform by several persons on previous occasions.

But I am not so vain as to think that the results can be achieved in a day or even in the lifetime of this generation. It is true, I dream of what may be possible in the future, but at the same time I feel I do not dream hopelessly though I am aware that "farming is anything but a get-rich-quick occupation. It is physically hard work for most, brain work for all and a constant source of anxiety" and farmers themselves who are directly concerned are not so unpractical as to hope for quick results.

EXTRACT.

Health in the Milk-Can.

(By Professor J. ARTHUR THOMSON,)

Milk is an almost perfect food, especially for those of tender years. Its perfection lies in the facts that it is readily digestible, that there is almost no waste, that it conduces to gastric education, and that it contains all the different kinds of food—namely, proteins, carbo—hydrates, and fats, plus a little pinch of salts and a great deal of water.

The limits to its perfection are two-fold; there is nothing to chew and milk is a good culture-fluid for various kinds of microbes, which are sometimes deadly. If we give a dog all the kinds of food that are theoretically necessary, but all in liquid form, the dog will die. The dog requires something to chew and enough solid stuff to keep the muscles of the food-canal in good tone. So, if we give our dog protein food in the form of raw white of egg, carbohydrate food in the form of syrup, and fatty food in the form of oil, and if we add some water, salts in solution, and necessary food-stuffs or vitamins, we are giving the creature all that its living matter theoretically