



**AgEcon** SEARCH

RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

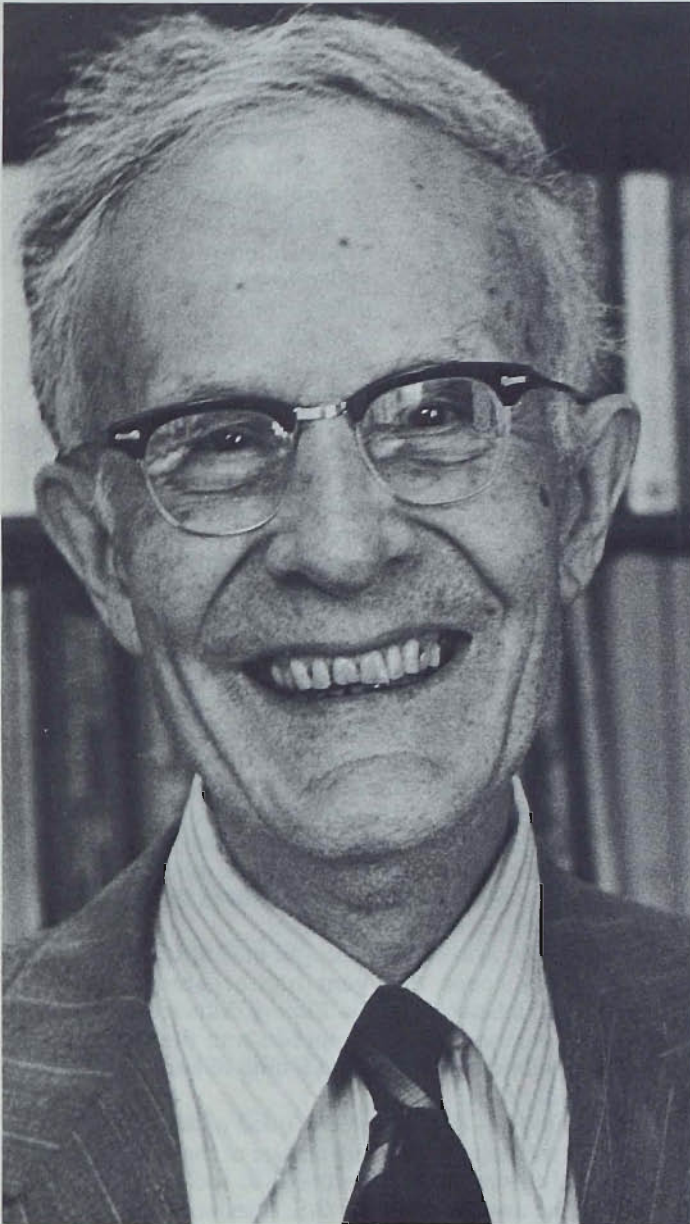
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*

# Theodore W. Schultz

## *Nobel Laureate*



*IT IS PUZZLING THAT A MAN WHO GREW UP IN the vast plains of South Dakota, who never received a high school diploma or a college bachelor's degree, who in the 1960s wrote a book largely ignored by the American agricultural economics profession would, nonetheless, be acclaimed, in 1979, as the winner of the Nobel prize for economics—with that book, *Transforming Traditional Agriculture*, figuring prominently in the reasons for the award.*

*People everywhere, including those who deal in policy matters, those who make the understanding of the economics of agriculture their profession, and especially the rural poor of this earth owe much to that man, Theodore W. Schultz.*

*Ted Schultz, a resident of Chicago, Illinois for nearly a half century, is as much at home on farms and in villages as he is in classrooms and in the halls of government. His first-hand observation as a youth of the adversities of farming led him to the study of economics. Though without "proper credentials," he persuaded John R. Commons to admit him to graduate work at the University of Wisconsin. He was awarded a Ph.D. in 1930 and took a position at Iowa State College in Ames. There, in subsequent years as head of the Department of Economics and Sociology, he attracted an outstanding group of scholars and developed social science research, extension, and teaching programs that were unique among the land grant colleges and universities of this country.*

*These were heady years for Ted Schultz and the young, vigorous Iowa State economics staff. But their success in working on relevant issues caused dissension—which erupted over the publication of a report that focused on dairying. The report recognized that oleo was as nutritious as butter. Ted Schultz did not capitulate to the pressure groups. Instead he proclaimed that the College must serve the general interests of the public and not serve the special interests. He resigned and moved to the University of Chicago.*

*In the ensuing years, Ted Schultz attracted promising and capable graduate students, while giving special attention to education, price policy, and problems of the poor. Under his tutelage, these students investigated the many facets of constructs he posited.*

*His writings, his students, and his advising so influenced how people think about education, research, and farm price policy that the Nobel Committee selected him to receive the 1979 Nobel Prize for Economics.*

—Editor

THEODORE SCHULTZ'S WRITINGS PROVIDE VALUABLE insights into his thinking as he puzzled over important economic problems. His September 15, 1943 letter to the President of Iowa State College was forthright. It objected to actions of the President's office—related particularly to the publication that had attracted the ire of Iowa farmers, Pamphlet No. 5, *Putting Dairying On A War Footing*. And, the letter objected to several other actions which had "...brought forth a crisis in the development of the social sciences..." at Iowa State College.

The letter also reminded the University President that

"...continued advancement in technology alone would not be sufficient to solve agriculture's problems" and "...that society as a whole and especially farm people must find answers to problems which can be solved only in the light of the social sciences."

But, Schultz's most forceful points in the letter were focused on the role of institutions of higher learning, including colleges of agriculture, in our society. He wrote

## HIS WRITINGS

"We also need to recognize at this juncture that throughout the history of the institution many faculty members of the Iowa State College have not distinguished between the interests of particular agricultural groups in the state and the general public interest. The failure to have served, first and foremost, the general welfare of the state and nation has quite understandably created expectations that the facilities and faculty of Iowa State College were primarily here to serve agriculture in ways prescribed by the organized pressure groups in agriculture regardless of the effects of what was done upon the welfare of the public generally. To have this traditional relationship challenged has been a severe shock to the agricultural groups. Protests are likely to continue until the administration and members of the Iowa State College faculty can demonstrate that an institution of higher learning such as this has a more important role to perform."

## Importance of Trade

Early in his career, Schultz recognized the productive capability of U.S. agriculture and the importance of international trade to the well being of U.S. farmers.

As a young economist shortly after going to Iowa State College as Acting Head of the Agricultural Economics Section at Iowa State College, T. W. Schultz authored World Affairs Pamphlet No. 11, *Vanishing Farm Markets and our World Trade*, for the World Peace Foundation. In arguing for a "more liberal trade policy," Schultz points out that

"...a realistic view of the facts forces us to the conclusion, whether we wish it or not, that American agriculture is still dependent upon foreign buyers.

"We see that the farmers who produce foods and raw materials in excess of the domestic demand hold the key to American farm prosperity. They, as it were,

## A LETTER OF RECOMMENDATION

*T. W. Schultz has had a deep and abiding interest in the economics of agriculture in lower income countries. Consequently, it is particularly fitting to include in this tribute to T. W. Schultz the letter of recommendation sent by Gian Singh Sahota to the Nobel Committee. Gian Singh Sahota, now with the Harvard Advisory team in Bangladesh, was a student at the University of Chicago.*

Theodore W. Schultz can be credited with at least one intellectual revolution of the magnitude of Lakotas' MSRP, at least one lasting orientation of a discipline, and at least one scientific service *ne plus ultra*.

### Intellectual Revolution

It was Schultz who announced the birth of the modern human capital theory in the year of 1960 in two articles: (one in the) *Journal of Political Economy*, 1960, and (another in the) *American Economic Review*, 1961. He then nurtured it and propagated the generalized capital theory and the value of time underlying it through attracting the best minds at the University of Chicago to do Ph. D. research on the topic; as consultant economist in numerous foreign countries; by spearheading numerous symposia, such as those published in the *Journal of Political Economy*, *Supplement Issues* May/June 1972, March/April 1973, and March/April 1974, among others; and as an intellectual force behind the USDA's and the U.S. AID's foreign aid for education, research, and development.

### Major Orientation of a Discipline

During the half century from his *Tariffs on Barley, Oats and Corn* [1933] to *Distortions of Agricultural Incentives* (ed.) [1978], Schultz has successfully completed a life-time mission of bringing economists into agricultural economics and vice versa. Among his numerous works which have spread his message to the four corners of the world the following two are representative ones: *The Economic Organization of Agriculture* [1953] and *Transforming Traditional Agriculture* [1964], both translated in at least five languages other than English.

### Scientific Service

Schultz' intuition and incisiveness in asking searching questions and suggesting productive hypotheses and in giving lead for their scientific tests is unmatched. An example should substantiate this statement. A great debate on the Nurksian notion of a zero marginal product of labor in traditional agriculture went on among development economists, and among Indian economists in particular, for over a decade during the 1950s. Dualistic theories based on this hypothesis thrived in development literature. Yet little scientific testing was done and it scarcely ever occurred to any Indian or other economist that the Nature had made an experiment to that end in the 1917 influenza epidemic in India. It was left to the Chicago-based Schultz to dig up that experiment in the early 1960s the results of whose analysis provoked if not startled the profession and started a bandwagon type of research that few scholars are fortunate enough to be the ancestors of.

/Signed  
Gian Singh Sahota

set the tempo of our agricultural well being.”  
(page 23, I)\*

His writings make clear that he favored trade and he criticizes vigorously policies that work against trade. For example

“The United States has much to gain from foreign trade in food, feed, and fiber. Nevertheless, we are embarked on an agricultural policy that is driving a wedge between the internal and external prices of several important farm products. These resulting price divergencies soon acquire vested interest, and conflicts arise as the inconsistencies between trade policy and agricultural policy grow.” (page 261, II)

## Prices

His books, pamphlets, speeches, and counsel to policy-makers emphasize the role of prices. In one of a series of Iowa State College pamphlets written in the 1940s, *Farm Prices For Food Production*, T. W. Schultz displays not only his direct writing style but also his belief in the effect of prices. He writes

“The test of farm prices lies in what they do. They should be such that they will induce farmers to produce the right foods in the right amounts. Three aspects of price are important: (1) the general level of farm prices; (2) the relationship of farm prices, one to another; (3) farm price uncertainty.”

In 1945 as professor of agricultural economics at the University of Chicago, T. W. Schultz authored a book for the Committee for Economic Development entitled *Agriculture In An Unstable Economy*. In it he emphasized the importance of prices and wrote

“...we must make prices, namely, the relative prices of both factors and products, the keystone of agricultural policy.” (page 242, II)

## Farmers and Poor People

Concerns for farmers and poor people are prominent throughout his writings. He anticipated the large migration of people from farms to urban employment and residence.

“Many thousand of family farms in the United States are too small as operating units to make efficient use of modern technology and earn a return for labor and capital inputs that are at all comparable to returns in other fields. This is one of the manifestations of an overcrowded agriculture—a ratio of people to land too high to permit an equilibrium distribution of the nation’s labor force. When high employment in other parts of the economy creates jobs, many more farm people will leave farming as they did during the war, and such migration will make possible the enlargement of farms.” (pages 247-248, II)

When writing about the contribution of agriculture to eco-

\* The Roman numeral in the parentheses identifies the publication included in the list of references on the last page of this article.

nomie growth, he compliments the imagination and the risk taking that resulted in today’s agricultural colleges. But he emphasizes how these efforts have been captured for the benefit of the establishment as distinct from farm people. He writes

“The answer to the agricultural establishment’s inactivity in the field of education resides unnoticed in early ideas and history supported in old age by vested interests. These early ideas were pathbreaking. They gave us organized research and organized extension as a part of the agricultural college and of the U.S. Department of Agriculture. They gambled on science and technology, which paid off handsomely. The agricultural college won support and a dominant position within the land grant enterprise. But this part of the establishment, which now has a strong vested interest in these early ideas, is not efficient in promoting the welfare of farm people. It promotes agriculture. It remains true to its banner, which has inscribed on it *Agriculture*. How different this history and institutionalization might have been had the banner proclaimed farm people instead.” (page 161, VII)

Similar concerns are reflected in his anxiety about tying farm program benefits to land.

“The value of wealth, which consists mainly of farmland, is subsidized, the value of farm work is depressed by acreage allotments and other measures to contract production. Thus, these programs are strongly biased in favor of farm wealth (income from property) and against income from farm work. The financial benefits in general and the government payments to farmers in particular go predominantly to the more well-to-do farmers, those at the top of the farm ladder.... The overall effects of the high farm price supports and associated programs upon the size distribution of personal income among farm families are clearly regressive. Could it be that there is a ‘war for poverty?’” (page 70, VII)

“It has been and continues to be a serious mistake to transfer into agriculture public funds that accrue to the benefit of farm land and thus accrue to the profit of landowners. Meanwhile the earnings of many farm people for the work they do, for the entrepreneurial contributions which they make to farming, continue to be too low. And this is the real problem.” (page 235, VII)

To focus on who is really benefitted by farm programs is logical for Schultz. He is concerned about poor people.

“It is clearly the realm of economic possibilities for us to be free of poverty.

“The choice to have such a society is ours to make. We may, of course, prefer not to avail ourselves of this choice whatever the social or political reasons may be.” (page 69, VII)

## Education

Concern for the poor and his interest in farmers account at least partially for Schultz’s attention to education. But for Schultz, the contribution of education goes beyond making it

possible for people to gain productive employment. In particular, education is an investment that affects productivity. In the Preface to his book, *The Economic Value of Education*, he writes

"...I began to see that the productive essences of what I was identifying as capital and labor were not constant but were being left out in what I was measuring as capital and labor. It became clear to me also that in the United States many people are investing heavily in themselves as human agents, that these investments in man are having a pervasive influence upon economic growth, and that the key investment in human capital is education." (page viii, IV)

"...the hypothesis here proposed is that these changes in the investment in human capital are a basic factor reducing the inequality in the personal distribution of income." (page 65, IV)

## Research

His recognition of the productivity of education led to a focus on agricultural research and technology by himself, as well as many of his students. As early as 1953, he wrote that

"These new techniques (for farmers) clearly alter the supply; they are far-reaching in their consequences; yet little is known about the underlying economics of the production and distribution of this technology." (page 109, III)

"The returns from these inputs (agricultural research) are large; the additions to the social product to be had from a further increase in expenditures for agricultural research are substantially larger than are the returns from (most) alternative uses." (pages 118-119, III)

## Lower Income Countries

Agriculture of lower income countries was a magnet for Ted Schultz. It involved puzzles related to farming, and farmers were his priorities.

"Why is traditional agriculture so niggardly? As I have already suggested, the meager increase in output of traditional agriculture is not a consequence of indolence or because of a lack of thrift. It is not because of some quirk in people's preferences as I shall show shortly. Instead, it is a matter of costs and returns. (pages 18-19, VI)

"Farmers are not perverse economic men in responding to economic incentives..." (page 19, VI)

His understanding of education and his own farming experiences gave him confidence about opportunities for farming. In his now-famous book *Traditional Agriculture* he writes

"There are comparatively few significant inefficiencies in the allocation of the factors of production in traditional agriculture." (page 37, V)

"...man who is bound by traditional agriculture cannot produce much food no matter how rich the land. Thrift and work are not enough to overcome the nig-

gardliness of this type of agriculture. To produce an abundance of farm products requires that the farmer has access to and has the skill and knowledge to use what science knows about soils, plants, animals, and machines...an approach that provides incentives and rewards to farmers is required. (pages 205-6, V)

His confidence is reflected in his writings

"Agriculture can be niggardly, but it can also produce abundantly." (page v, VII)


"To settle for a reduction of hunger and no more is to sell agriculture short because it can contribute beyond this to economic growth. How much it can contribute depends on the cost of and return to the investment required in modernizing agriculture." (page v, VII)

"As one who was reared in the Dakotas with its volatile weather, I look upon this (a spell of bad weather) aspect of nature as perfectly rational." (page 4, VII)

## The Nobel Prize

In accepting the Nobel Prize, Theodore Schultz spoke to the themes that had inspired his entire career. They are themes that inspire all of us and challenge us also to be at home among farmers and the poor across the land and in the villages throughout the world.

"Most of the people in the world are poor, so if we knew the economics of being poor, we would know much of the economics that really matters. Most of the world's poor people earn their living from agriculture, so if we knew the economics of agriculture, we would know much of the economics of being poor.

"People who are rich find it hard to understand the behaviour of poor people. Economists are no exception." 

## Some References

- I. *Vanishing Farm Markets and Our World Trade*, World Affairs Pamphlets, No. 11, World Peace Foundation, 1935.
- II. *Agriculture In An Unstable Economy*, McGraw Hill, 1945.
- III. *The Economic Organization Of Agriculture*, McGraw Hill, 1953.
- IV. *The Economic Value Of Education*, Columbia University Press, 1963.
- V. *Transforming Traditional Agriculture*, Yale University Press, 1964.
- VI. *Economic Crisis In World Agriculture*, The University of Michigan Press, 1966.
- VII. *Economic Growth and Agriculture*, McGraw Hill, 1968.