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Staff Paper Series

Staff Paper P76-14

March 1976

An Overview of Land Use Issues

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I welcome this opportunity to talk with you about land use problems.

I view this as a meeting of educators, engaged in a common search for a proper mode of communication with a public that is new to many of us, on an issue that is not new but has been redefined in recent years to give it a degree of importance that is new in our history.

First I would like to answer a question: "Why is this issue of land use and land use planning more important now than it was a few years or a decade ago?" In the first place, because there has been a basic change in the world economy. This is one of the key points to keep in mind. Population growth in key countries around the world, coupled with their desire to achieve a higher level of living by a leap-frog process rather than by an evolutionary process, has made it attractive for many of the countries to import the raw materials for their higher standard of living. This has inhibited development of internal structures of government and an internal system of production that could support the output of these raw materials from their own resources. The number of countries around the world that can afford to make choices among these options has increased. That was the dramatic evidence provided by the Arab oil embargo. That was notice to the world that there is now a growing number of countries that can choose to import their food, rather than modernize their agriculture.

^{*} Transcript of talk presented at Minnesota - USDA Land Use Workshop, Region 7, Rochester, Minnesota, December 18, 1975.

That choice was not possible before. Or, if it was possible, it was not economically feasible. Transportation costs were high, storage costs were high, we did not know how to handle the stuff efficiently, and the countries that needed it could not distribute it effectively even if you got it to them. This has changed and the result is that we have the Arab oil countries, other mineral rich countries like Venezuela, Chile, Nigeria, Indonesia, and a group of countries in the Soviet block that have purchasing power but are deficient in agriculture. For political reasons they choose to go to the world market for their supplemental grain requirements rather than confine themselves to their own domestic output or invest adequately to improve it. This demand is effective demand, backed up with purchasing power. These countries are not only insistent demanders of food but are very rapidly increasing in population.

Unlike previous eras of food shortages, the United States finds itself the principal supplier to a group of countries that come to us for grain but not necessarily because they are starving. We are not supplying most of our grain exports to starving people. We are supplying grains to people who for one reason or another -- internal politics, cultural tradition -- find it easier to import their food stuff than to grow it. And many of them have the capacity to grow it. The most glaring example is the Soviet Union. It has been easier to use their gold mining activity in Siberia -- mine gold and sell it on the world market for wheat -- than it has been to modernize and regularize their own wheat economy. This has completely altered the land use balance in the United States. Until recently, we used our land to supply bread grains, feed grains and fodders for a demand structure that was largely domestic. While we were important in the world market, production for export was not incorporated solidly into our production

plans. We regarded our domestic agricultural plant as designed to serve primarily a domestic market. While we recognized that we were serving a foreign market, we did not rate it very highly and we certainly did not rate it as a stable prospect because it was notoriously unstable. This is what has changed. We are now increasingly subject to the vicissitudes of world market demand. It has altered the balance between land uses designed to produce grain crops and land uses designed to produce feeds and forages. The animal product vs. grain product price ratios have shifted. This is the first key lesson.

Whether or not this is a permanent and durable shift -- I do not know. I do know some bits and pieces of the puzzle that lead me to think that it will be, if not durable, at least with us for the immediate planning horizon -- say the next 5 to 10 years. For example, the Japanese in 1960 were 83% self sufficient in food stuffs. They estimate in 1975 they were 40% self sufficient. This sharp drop in domestic self sufficiency in one of the world's largest industrial and trading nations has been due to a number of causes. One major cause is that they have increased their caloric intake from about 2200-2300 calories a day to about 2800-2900 calories a day -- a big jump. Another reason is that rising labor wages in Japan affect their farm labor and youth, just like rising labor wages in America affect ours -- they suck labor out of the countryside. The degree of intensity in land use in Japan has gone sharply down. There is very much less double cropping today than there was 15-20 years ago, and the intensity with which they are using their land resources has declined. Japan is one of the world's greatest users of imported agricultural products. one of our most stable and reliable customers. Their projected grain deficit in 1985 is 35 million metric tons, which is 5/6's as large as the total

projected deficit in grains of 43 million metric tons for all the developing countries of the world combined. In other words, what happens in Japan is going to be of major importance to the agricultural sector of the United States.

Those of us in the upper midwest tend to be at the end of the supply line. By one method of reckoning, we can determine our dependence on foreign markets by dividing our share of total output by the portion of total output sold abroad. If the U.S. exports 50% of its soybeans, then we can say that 50% of the soybeans grown in Minnesota are grown for export. If we export 55% to 60% of our wheat, which we do, then we say 60% of the wheat grown in Minnesota is grown for export.

But this is a misleading way to make a comparison. A more realistic way is to ask which region would go out of production first if we did not have that export market for soybeans or for wheat? In other words, when you restrict demand by cutting exports, who would be hurt the worst? The answer is: the people who have no other alternatives -- no crops to which they can shift the use of their land. This is not exactly a characterization of Minnesota, but it does suggests that the areas that would be hurt worst are the areas that have the highest transport costs to tidewater or to domestic markets, have the highest energy costs of production, and have the fewest alternative opportunities for transfer of their land to other crops. Instead of wheat in northern Minnesota, for example, you can grow barley or oats, and some people can grow potatoes and sugar beets, but the land use alternatives are distinctly limited.

That leads me to the second major change of recent years and that is that the range of those alternative choices has been narrowed. We have fewer opportunities now to shift from grain crops to livestock products than we had until quite recently. Historically, Minnesota has been principally a

livestock conversion economy. We grow grains and feedstuffs and put them through animals and sell animal products. Until the last 5 years, cash receipts from farm marketings in Minnesota had averaged 70% animal products and 30% from grain products. This had been a stable ratio for almost the entire period since the second world war. Now this ratio has flipped over. For the latest year for which we have complete statistics, which was 1974, 57% of the income from farm marketings in Minnesota was from the sale of grain products and 43% was from the sale of animal products. That basic ratio reflects a major transition from concentration on animal conversion to a less complex form of land use and to a greater dependence on cash grain crops. As a consequence, we have lost resiliency in our absorptive capacity to make on the farm adjustments to changes in prices and changes in market outlets. This transition is not irreversable, but it is so difficult and expensive to reverse that it is not likely to happen in any short period of time. Let me say that a different way. When you go out of dairying into cash grains, you not only dismantle dairy herds and barns and milk hauling routes, you dismantle banks and merchants and supply agencies and small towns. The entire community structure is altered. To go back into dairying is no simple decision, once you disband the dairy enterprise. That is also generally true of hogs, but not to the same degree. We have already disbanded a major part of the cattle feeding enterprise. We have about 40% fewer cattle on feed in Minnesota now than we had 5 years ago. They have moved south into Texas and Oklahoma, eastern Colorado, and southwestern Kansas.

We have many fewer opportunities in terms of farm decision making to decide to draw up our belts, tough it out, feed low value grain or forage to animals and earn a little more money by putting more labor into the

animal enterprise. Although the hourly rate of return was often low, we could invest many hours in our animals. That has been our salvation in the past. We had stability of expectations and relative stability of income because we had the animals as conversion factories for our grain. This gave us absorptive capacity to withstand economic shock. We have lost much of this capacity, not all of it, but quite a bit. This creates a land use pattern that is more rigid, more irreversible and more fragile. The system can be broken more easily with a given shock.

I shift attention now to the domestic urban front, where some changes have taken place that are equally significant in terms of the altered framework within which land use decisions are made.

The time available will only permit me to outline some of the key changes. The most important in terms of its impact on land use concerns the industrializing area of the middle west included in a long arc drawn by swinging a line west from Duluth to include Sioux Falls, Omaha, Kansas City, St. Louis, Cincinnati, and on out to the Atlantic at about Newport News, Virginia. In that urbanizing area, there is no longer a functional distinction to be made between urban and rural land uses. They are so intermixed and interact with each other so powerfully that it is more useful to consider this as one large urban impact area. Almost no part of that area is free from the forces of urban demand for farmland for non-farm purposes. We meet here today in a city that typifies that demand. Rochester and Olmsted County in Minnesota present a classic case of a large, effective non-farm demand for farmland for non-farm purposes. The example is repeated over and over again throughout the industrial belt west and south of the Great Lakes that I have just sketched.

Recent events that have changed this non-farm demand element bear a closer look. The most important change has resulted from the way in which we financed the interstate highway system. It is ironic to recall that the Act of Congress that created this system was called an Act to Create an Interstate and Defense Highway System. It is almost surely true today that if defense was our dominant concern, we would put our money in the railroads. By destroying or weakening the railroads with a heavy public subsidy to the interstate highway system, we have done a great disservice to the national defense. We have made the country much less able to react quickly to an embargo on oil imports, for example. The interstate and defense highway system, which was supposed to make us strong and powerful, has weakened us in many ways and not least in the way in which it was financed.

The Federal Highway Trust Fund is primarily dependent on taxes on motor fuel and tires. This means that revenue is a linear function of the number of times the wheels go around. If you double the distance traveled you double the revenue. We spend the money to cover distance and to relieve congestion. We have time and distance in the expenditure function and distance only in the revenue function. The revenue and expenditure system is non-symetrical. In effect, we have created a money pump, by collecting money on the basis of distance traveled and spending money to expand the urban commuting circle of the cities. This was not contemplated at the time of adoption of the original Interstate and Defense Highway Act. In fact, the original Act prohibited the expenditure of the highway trust funds within city limits. Authority to do so was added later. Over time, the lobbying forces of the cities and of associated interest groups, especially the automobile builders, oil and rubber companies, machinery and equipment

manufacturers, construction trade unions, the teamsters union and other similar powerful economic forces in the community, insured that the bulk of the money would be spent to expand the suburbs. We spent most of the highway trust funds to make it quicker, easier, and cheaper to get from homes in the country to jobs in town. We have greatly lengthened the tolerable commuting radius. The effect of this expenditure has been to create windfall capital gains for landowners at the urban fringe.

This has been a powerfully engineered consequence of public policy. It is by no means an example of a free market at work. It is an example of a market distorted through very powerful interference by pressure groups acting in the name of government. In this circumstance, it is wildly misleading to say that we will let market price decide the use of land at the suburban fringe and yet you will hear people say that. The prices in question are the result of a highly tailored man-made process that is anything but a free market response to market forces. The resulting prospect of capital gains in land becomes the major engine for our total urban expansion effort. All developers work on that margin. They buy their construction material in a national market, over which they have very little influence. They buy their labor in markets which they can influence only to a limited degree. They rent their capital in a national market, at interest rates that are largely beyond their control. What can they influence? The price of land. They leap frog. They sprawl. They buy up cheap land far out and develop it, preferably by persuading the highway authorities to extend a highway, or the township to upgrade the roads, or the sewer board to put in sewer interceptors. This is the process by which we have generated a very much greater per capita use of land for urban purposes than any other nation in the world.

These are not the only forces that have been at work. Another has been the way in which we have financed housing. We have a fiction in the United States that the federal government should not be active in the housing market except in the financial dimension. This started with the GI Bill after the Second World War to provide homes for returning soldiers. The government picked up the risk element in mortgage lending. This enabled lenders to lower down payment requirements, lengthen the term of the loans, and operate with a subsidized interest rate. We grew accustomed to government assumption of risk elements in home mortgage lending for VA and later FHA financed housing. One consequence was that government mortgage insurance agencies and the private lending agencies which they insured preferred that loans should be given to build single-family detached houses on lots in the suburbs. In fact, the subsidy was generally not available in the beginning to do anything else. You could not get your GI entitlement in housing if you wanted to live in an apartment, a condominium, or a multiple family unit in the center of a city in a decaying area. The effect of governmental assumption of the risk element in housing finance has been to define that assistance as a very substantial subsidy to the suburbs. Only the person building a single family detached house on a separate lot could derive the maximum benefit from this particular subsidy. The result has been that government housing finance policy has generated an accelerated demand for open space and thus for sprawl.

We have augmented this in other ways in which we finance urban affairs.

One of them is by authorizing income tax exemption for municipal bonds. In

effect, the government has said to the wealthy investor "If you will lend
your money to a deserving municipality that wants to do public good by building
a sewer system or improving the roads and streets or putting up a new school

building, the federal government will not tax the income from those bonds, thus foregoing federal revenue so that the municipality can borrow at a lower rate". It has been a high subsidy. It is estimated that in 1973 this cost about \$3.5 billion in foregone federal revenues. Until quite recently this was the major form of revenue sharing that was available in the United States federal government system. We now have other forms of revenue sharing, but they are quite new. It was not an even-handed subsidy, in the sense that to obtain it the municipality first had to bond itself. Those who did not borrow did not get this subsidy. In effect, the community was told: The more you borrow, the higher the degree to which the federal government will subsidize your investment in public goods. What communities will make that decision? Those with many children to educate, roads to build, sewer and water systems to install — in short, new suburban communities. They have shared heavily in this form of federal subsidy.

There are several other ways in which we have subsidized the suburbs, but I pass over them and shift attention to the farm sector, where some parallel unintended subsidies or unplanned investment incentives have been introduced. What I have said thus far can be regarded as observations that might be made by persons standing in the city center and looking out. I want now to go out into the farm area and look in towards the city and see what has been taking place. Here too our policies have had severely distorting influences.

This section of my talk could be entitled "The Rising Cost of Illusions".

Many things have been going up in price lately, but one of the things that

has been going up in price most disasterously is the cost of things we know

for sure that are not so. I will illustrate this with some examples. One

I will call the money cost illusion -- that money cost saved is real progress.

One of the ways this shows up is in the illusion that it is cheaper to live

in the suburbs and that the price can equate the social costs of alternative land uses in the suburbs. It is frequently argued that we should let the market decide whether the farmer keeps the land or whether the suburbanite-residential dweller gets the land. The developer can be the broker or the go-between in that decision. We have recently decided in Minnesota that this solution is intolerable. We have adopted a "Green Acres" law that sets up a system of preferential tax treatment for farmland in the urban fringe. If the owner has been farming the land for seven years, has 10 acres or more, and receives more than \$300 annually from the sale of farm products and meets some other requirements, his tax will be based on the assessed agricultural use value of the land instead of its market price. This gives rise to a new set of problems, since the determination of value in agricultural use is an art, not a science. In fact, it is an exercise in crystal ball gazing. Nobody really knows how to determine the value of land in agricultural use. But the process does result in a reduced tax burden.

The Green Acres Law reflects an attempt to hold land in agricultural use by manipulating the property tax. It is a minor aspect of our tax policies that affect agriculture. Our income tax policies have been much more powerful and much more pervasive in that it has been our national policy to grant preferential treatment to certain kinds of income in personal income tax reporting. One example is the deductability of interest. Another is the option given to farmers to choose to report their income on a cash basis instead of an accrual basis. A third is the rather generous interpretation of internal revenue rules and statutes with respect to the mixing or melding of income from several sources. We permit people who have income from a variety of sources to combine it within very broad limits in determining their income tax liability. A fourth feature is our national policy to tax capital

gains at a sharply preferential rate of taxation. The personal income tax is a graduated and progressive income tax, with the higher rates roughly as follows: from \$44,000 to \$52,000 of taxable income, the man and wife filing a joint return will be paying tax at a marginal rate of 50%. marginal rate increases to 60% at \$100,000 and 70% at \$200,000. If you are a very wealthy person and have over \$200,000 in taxable income, any money you earn over that amount will be taxed by the federal government at a rate of 70%. We tax capital gains at a much lower rate. If you can receive income in the form of capital gain on an asset held more than six months, if it is conventional capital, or more than two years, if it is breeding livestock, then the marginal rate is 25% on the first \$50,000 in capital gain and 35% on the rest, but never higher than 35%. If you can arrange to receive income in the form of capital gain, instead of wages and salaries, you can take advantage of this institutional fault in the rate structure and reduce what would be a 70% marginal personal income tax rate to a 35% capital gains tax, thus cutting the rate in half for income over \$200,000. It is appropriate to talk about this in Rochester, because a disproportionately large fraction of the population in Rochester finds it rewarding to take advantage of tax shelters based on this feature of the tax laws, as a result of income generated by the Mayo Clinic. The following table will illustrate some of the magnitudes involved. It shows the variation in the proportion of income received from wages and salaries, dividends, and gains from the sale of assets (capital gains) by adjusted gross income size classes, based on an analysis of U.S. federal income tax returns for 1968.

For taxpayers who had less than \$5,000 of adjusted gross income, wages and salaries were 86.8% of total income, dividends were 1.9% and income from sales of capital assets was less than 1%. In the \$5,000-10,000 adjusted

Table 1
Federal Individual Income Tax Returns 1968

| Data |
|----------|
| Other |
| and |
| Income |
| of of |
| Source |
| |

| Adjusted Gross Income Classes | Nontaxable Returns | Taxable Returns | Adjusted Gross Income (\$1,000) | Salaries and Wages | Dividends 1n AGI | Sales of Capital Assets |
|--|-----------------------|--------------------|---------------------------------|--------------------------|------------------------|----------------------------------|
| Totals | 12,440,000 | 61,288,708 | \$538,296,039 | 81.7% | 2.7% | 3.1% |
| 000 23 8 | 12 008 570 | 776 686 61 | 58.173.492 | 86.8% | 1.9% | %6.0 |
| under 35,000 | 393 155 | 22,035,040 | 170,115,657 | 9.06 | 6.0 | 0.8 |
| \$3,000-\$10,000 \$10,000-\$15,000 | 26,123 | 11 960.870 | 144, 253, 752 | 6.06 | 6.0 | 1.1 |
| 615 000 620 000 | 6 803 | 3 654,186 | 61,999,190 | 84.6 | 1.8 | 2.2 |
| \$13,000-\$20,000 | 0,000 | 1 178 276 | 26,015,747 | 72.6 | 3.7 | 3.8 |
| \$20,000-\$25,000 | 1,734 | 510,270 | 14 141 860 | 61.5 | 5.1 | 5,3 |
| \$25,000-\$30,000 | 1,231 | 717,200 | 26,141,030 | 9.57 | 7.5 | 7.5 |
| \$30,000-\$50,000 | 1,043 | 300,788 | 19 921 874 | 37.1 | 11.9 | 11.8 |
| \$50,000-\$100,000 | 650 | 62,684 | 8 272 339 | 27.8 | 20.4 | 21.8 |
| \$100,000-\$200,000 | 14.0 | 15 327 | 4,425,942 | 16.5 | 25.3 | 39.8 |
| \$200,000-\$300,000 \$500,000 \$1,000,000 |) [5 | 2,583 | 1,744,087 | 8.1 | 24.7 | 56.0 |
| \$1,000-\$1,000,000 \$1,000,000-plus | 31 | 1,091 | 2,272,563 | 3.9 | 22,1 | 0.89 |

Source: New York Times, September 13, 1971, p. 34.

gross income size-class, 90.6% of the income was from wages and salaries, nine-tenths of one percent from dividends, and eight-tenths of one percent from sales of capital assets. For the \$10,000-15,000 size-class the proportions were about the same, and even in the \$15,000 to \$20,000 bracket, 84.6% of the income was from wages and salaries, 1.8% from dividends and 2.2% from sales of capital assets. If we jump down to the \$100,000-200,000 adjusted gross income size-class, 27.8% of the income was wages and salaries, 20.4% dividends, and 21.8% from sales of capital assets. From \$200,000 to half a million, 16.5% of the income was in the form of wages and salaries, 25.3% in dividends, and 39.8% from sales of capital assets. At adjusted gross incomes of over a million dollars, 3.9% was wages and salaries, 22.1% dividends and 68% was from sales of capital assets.

The mesage of the table is clear. The higher the income tax obligation, the more ingenious people are in finding ways to avoid receipt of income as wages and salaries, which are taxed at the maximum rate, and in shifting over to the receipt of income from the sale of capital assets, that is, to convert it into capital gain.

This opportunity is great in agriculture, because land and breeding livestock are classic examples of capital assets that can appreciate in value over the long term. The opportunity has been magnified by the option we have given to farmers to report income for tax purposes on a cash basis instead of requiring them to report on an accrual basis. The livestock breeder can deduct the cost of rearing the animal as an annual expense each year and if the animal is kept for two years, any excess of sale price over purchase price is a capital gain. We should not be surprised that animals, for example, sell for many thousands of dollars. The price reflects bidding

among alternative wealthy buyers for the privilege of acquiring a vehicle for the conversion of annual income into capital gain.

Exactly the same thing is going on in the sports field. There is a direct parallel between the price of a Minnesota Vikings football player and a Charolais bull. Both of these properties are being used by their respective owners to achieve tax shelters through capital loss and capital gain conversions in the accounting process. One reason why so many ball clubs and hockey clubs and basketball clubs are now in trouble is that the population of very wealthy people who can afford to bid for this opportunity to minimize their income tax obligation has been reduced by the recession. The tax shelter incentive only works when you have people with a lot of income seeking tax shelters. That demand has been drastically reduced in recent months.

We have a number of institutional arrangements and financial institutions in the state that are designed to serve that market. The IDS tower in Minneapolis can be regarded as a gigantic monument to tax shelters. In the agricultural field, investment firms have been actively engaged in devising ways to attract investors into agriculture by using tax shelter opportunities that have been created by cash-basis accounting and capital gains prospect in land and livestock. They have a badly shaken clientele over the last few years in livestock. What happened to beef cattle ranches and feeders in 1973-74 was disasterous and it certainly cooled the enthusiasm of investors for many of the tax shelters associated with cattle feeding. This has been the short-run consequence. But if these institutional arrangements continue unchanged over a long time period, it will be inevitable that the land of the United States will be owned by the wealthy and that the breeding herds of the United States will be owned by the wealthy, and

that only the wealthy can afford to own sports clubs and racehorses.

This is the direction in which we are headed, and running fast. These are some of the forces at work in distorting the rural land market in ways that parallel the distortions in the urban land market and that we have not taken into consideration in tailoring our policies with respect to land use and land use planning.

There is another illusion that is important in this policy mix and that relates to the structure of local government. The first of our costly illusions was the money cost illusion — that money cost equates the relative efficiencies of resource use at the margin. The second is the illusion of local government sovereignty. It is an article of faith in the American political system that we favor the man with dirt under his fingernails, we favor the laborer, we favor the small farmer, and we favor the small unit of government. We frequently fail to demonstrate this favor, but that is the illusion.

One consequence of favoring local units of government is that we are committed to the establishment of governmental units in the United States on the principle of a legal separation of authority that invites a direct parallel with the Western mining claim. To encourage prospecting for minerals, we say to the prospector "If you find something that you think is valuable, drive four corner stakes around it, measure it off, describe it so that a third party can go out and find the same plot of land that you specify in your description, register it, and we will give you a monopoly right to mine the minerals". That is the way we allocate opportunities in prospecting for mineral wealth, by the granting of a local monopoly for land use. We do exactly the same thing with municipal government. We say to the local municipal authorities "Stake out a claim, rig your boundaries in such a way

that you can enclose the largest volume of taxable capacity with the lowest prospect for incurring public service costs, and we will give you an exclusive right to mine that tax lode. We will grant you a nearmonopoly possession of the tax base".

We have modified this principle in the Twin City area with the fiscal disparities law, but it is a minor amendment, and outside of the Twin City metropolitan area there is no similar effective device available. The consequence is that we have put a premium on the Balkanization or parcelization of local government. We did it for the best of all possible motives. We want to maintain grass-roots democracy. One of the ways to achieve this is to maintain the strength of local institutions. We want to bring government close to the people. In the process we guarantee that the richer communities will have the lower tax costs. In the Twin Cities, the highest level of public service and the lowest tax burdens are in the more affluent suburbs, including North Oaks, Edina, and Golden Valley. This is also true in Olmsted County. You have a rich tax base here that you have been mining. It is a tax base that has been created by the spending of money that was gathered from all over the United States and the world -- it was not created on the basis of crops harvested in Olmsted County. Sick people from all over the world come here and support the institutions that create the tax base that you then have the monopoly to mine. It is this element of inequity in the system that is creating distortion. This is another reason why land use planning has become much more important in our generation than it was a few decades ago.

This illusion of local government sovereignty has had another consequence in that it guarantees sprawled cities. Apart from the incentive structure created for the property developer by the way that we finance housing and

highways, the way we Balkanize local government alone would guarantee sprawl, even if these other forces were not working. We reward the unit of government that incorporates itself in the suburbs, draws a boundary like a moat around a feudal castle, and says to the rest of the world "keep out". This means that developers must keep looking further and further afield for areas that they can lay out, draw a boundary around, develop a tax base and attract high income home builders into their fortress city by promising protection against the barbaric invaders. In this sense, we have created a new version of the medieval feudal structure in our suburban governmental system.

Finally, our parcelized local governments maximize the negative externalities associated with public decision making. Before I proceed, I had better explain that bit of economic jargon. Externalities are consequences that occur outside the framework of the costs and benefits that were considered by the decision makers that took the decision in question. For example, the farmer makes a decision to feed cattle. In the past, in all probability, he did not take into consideration when he made that decision that there might be some effluent from his cattle feedlot that would drain into the local water system or that would show up in lakes downstream and that would impair the residential property of lakeside dwellers in his community. These consequences were outside his decision making frame. This is an example of a negative externality.

There are also positive externalities. An example is the decision of a young person to go to college. This improves the perceptions of that young person, enriches life, and it may even increase earning capacity but that is not essential. The main point is that it enriches perception and therefore ability to respond to nature, the environment, and other

people. In the process of achieving this personal goal, the student also gives the society the use of a trained brain, a trained pair of hands, in the possession of a more perceptive individual and a better trained worker. That is a positive externatlity. It occurred outside the decision-making framework of the young person who decided to go to college.

The way we have parcelized local government has guaranteed the maximization of negative externalities. The framework of decision-making is so narrow that local governments cannot possibly take into consideration all of the consequences of their decisions. And many of those consequences are negative, not positive. If they decide to grant variances in the local zoning ordinance, for example, they decide it within their framework, and they are not compelled by politics, law, or economics to take into consideration the consequences for the nation as a whole. For example, each individual suburb benefits from maximizing its share of the federal Highway Trust Fund to build a four lane divided-center highway out to its suburban subdivision so its residents can get back and forth to town quicker. That yields a positive consequence for the suburb. If we yield to this type of pressure, the total structure results in a negative externality for the nation as a whole, because it makes us increasingly dependent on oil imports for our fuel.

We have tremendously weakened the United States by a suburban pattern of living that requires today the import of 40% of our fuel oil -- an amount estimated to go to 50% by 1985. It is difficult to imagine any action taken in the past twenty-five years that has weakened the United States more effectively than has our pattern of suburban sprawl. And that was never taken into consideration by the units of decision making at the local level that created sprawl, whether or not it was developers, government

units, or individual householders who made the key decisions. The process of Balkanizing our suburbs by encouraging and rewarding sprawl has enormously increased our vulnerability to international pressure politics. That is a dimension of land use planning that cannot be adequately weighed at the level of local government.

I turn now to some of the consequences of this institutional structure as they affect agriculture. In Table 1 above we saw evidence of the way the wealthy have shifted their income sources from wages and salaries to income from the sale of capital assets, since in this way they can take advantage of the flat ceiling of 35% on the tax on capital gains. In the agricultural sector, this has been elaborated by this possibility that I mentioned a few moments ago of melding income from farm and non-farm sources. The classic example is the wealthy oilman with a cattle ranch. He could explore for oil, write off most of his exploration costs as current expenses, and use the depletion allowance if he did find oil, meanwhile taking advantage of accelerated depreciation on all his equipment. At his cattle ranch, he could invest heavily in breeding stock, treat maintenance costs as current expense items, and when the breeding animals are sold they are capital assets and eligible for capital gains tax treatment. He could upgrade the quality of the ranch, improve the water system, put in a road system and do everything possible to spend money at least a little bit wisely. All he needs to do is to have spent it in some way so that when he sells out he can recapture 30¢ to 50¢ on the dollar spent. In the meantime, he is receiving an interest free loan from the Internal Revenue Service since his income would have been taxed at marginal rates of 50 to 70 percent. This is why we have so many limited partnership investors in cattle feeding firms. In effect, it can be rigged in such a way that the federal government finances the operation by foregoing interest on the taxes postponed. With interest rates at 8 to 10 percent it is not necessary to have any other advantages to make it a very attractive proposition. The postponed taxes alone constitute a very big subsidy.

This form of tax sheltered financing is also prominent in the housing construction industry. You have here in Rochester some of the best examples of this to be found in Minnesota. The optimum reward comes from the construction of a rental apartment, if possible with a federal subsidy, perferably for housing the aged, the sick or the infirm, and using accelerated depreciation in depreciating the rental property. The best strategy is to give it a short life expectancy, which means to build inexpensively, expect it to fall down in 25 years, and attempt to persuade the federal Internal Revenue Service to let you use a 4% annual depreciation rate, which you can accelerate by use of double-digit or sum-of-the digits depreciation. After you have done this for about seven to ten years, convert it to a condominium, and sell out. Now in theory, you were supposed to benefit from the accelerated depreciation privilege early in the life of the asset and to pay for it later in the life of the asset. But in fact, you only want to hold this asset for the part of its life during which you benefit from the accelerated depreciation advantage. When you have to begin to pay for your previous advantage, you sell out. In the meantime, you have received an interest free loan. This has determined the nature of much of our recent urban construction. One consequence is that we must ask: Who is going to buy these rental apartments when the decision is made to sell out or convert them to condominiums? The answer has to be: People with enough money to cover the downpayment. This rules out the poor and many lower income families. The preferred tenants are upper income families or individuals that can

raise the downpayment when the owners make their decision to sell. The consequence is that an incentive is created for the construction of rental apartments that have a good prospect of being sold to the people who are in them when a decision is made to convert to condominiums for tax reasons after about seven to ten years. This is what the private housing market has been producing. Our central cities are increasingly composed of luxury level apartments, or very highly subsidized housing for the aged or the poor, with a big deficit in single family housing for lower and middle income families. The subsidies for that class of houses are only available in the suburbs. So our central cities are increasingly made up of the rich, the old and the poor. This is the result of a tailored incentive system which provides another illustration of the way in which the illusions that we hold have worked to defeat our goals.

One final comment concerns the impact of inflation on our land use policies. All of the incentives that I have enumerated above would be powerful without the prospect of inflation. Land values have gone up in the past even when the value of the dollar was steady. In fact, the history of the United States is a history of over 200 years of land value appreciation. This has been built so deeply into our pattern of expectations that we do not understand and appreciate the force of our anticipation of an ever onward and upward curve of land values. That rate of increase in the past, however, was not a frightening annual rate of change. We have not had in the United States a history of recurring inflation on a scale that destroys wealth. We have had a more or less steady climb with some ups and downs.

Never in our history have we had our currency destroyed. This happened twice in one generation in Germany. It has happened several times in this century in Italy and in France. It has not quite happened yet in England

but the prospect is very close. It has happened in Japan. Most of the developed countries of the world are intimately acquainted with the disasterous consequences of inflation. We are not. Inflation has been good to us. It has been identified with an ever onward and upward curve of land values that has enabled farmers to live poor and retire rich. It has enabled bankers and lenders to make unwise loans on real estate and be bailed out by appreciation in land and building values.

The danger is that this pattern of expectations with respect to inflation may be changing in the United States. We are now experiencing inflation on a scale that is not tolerable. If it continues very long, it will destroy We had rural land value increases in Minnesota of 20% in 1972-73, 42% in 1973-74, and 24% in 1974-75. This is a cumulative increase of 112% in (24%) in (2three years, for farmland. This level of land value increases cannot be sustained. If it does not stop, the institutional structure will break down. The credit system, the tax system, and the incentives that motivate investors will so distort the land use pattern that we will create problems that our institutions cannot resolve. In the process, it will destroy the market processes by which the property-owning middle class has acquired and transferred its real property. The lesson of history is that labor can cope with inflation if it is organized powerfully. The rich can cope with inflation and, when scared enough, can be the ultimate successful bidders for real estate. The people who suffer are the people who use real estate to satisfy housing desires and who use land as a base for an occupation. A farm is not simply an asset to a farmer, it is an employment opportunity. This is the option that is destroyed by inflation in land (values).

The ironic consequence is that the people who oppose combating this pattern of destruction are the very people who will be destroyed. You can

almost always mobilize small property owners, whether in town or in the country, against any land use planning. Yet without land use planning, their way of life is doomed. Explaining this calls for the exercise of the highest skills in teaching. That is why I regard your work with rural people as one of the most important educational tasks we face in the United States today, and why I welcome this opportunity to meet with you as educators.