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**LAND
USE
PLANNING: An Analysis
of People's Attitudes
In Region VI,
North Dakota**



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TABLE OF CONTENTS

	<u>Page</u>
HIGHLIGHTS	11
LAND USE PLANNING	2
Land Use Planning Process	2
Land Use Issues	3
PROCEDURES AND METHODS	5
IDENTIFICATION OF LAND USE	5
Pollution of Streams	9
Abandoned Farmsteads	9
Inadequate Control Methods	10
Power line and Irrigation Conflicts	11
ANALYSIS OF ATTITUDINAL SURVEY RESULTS	12
Conflicting Values	17
Formulation and Implementations of Land Use Policy	19
Local Government	19
State Government	22
Federal Government	23
Land Use Control Methods	23
LIST OF TABLES	26
LIST OF FIGURES	26

Highlights

This study was undertaken to promote a better understanding of land use planning, to identify land use problems in State Planning Region VI, and to analyze the attitudes of residents in State Planning Region VI toward land use planning.

The residents of Region VI did not perceive that land use problems were crucial to the region. Four of the eleven land use problem statements posed in the survey schedule were positively identified as problems by the residents of Region VI. The four problems identified were: (1) pollution of streams from farm chemicals, runoffs, and bank erosion; (2) abandoned farmsteads; (3) lack of adequate control methods in the use of land; and (4) the impending construction of power lines across irrigable farmlands.

The degree of importance placed on a problem depended on the respondent's place of residence and occupation. Lack of developed space for recreation, pollution of streams, lack of adequate farm-to-market roads, and the construction of power lines across irrigable land were among the problems that varied in importance, depending on the respondents' residence and occupation.

The residents of rural farms were more opposed to land use planning, while urban residents were more receptive. Landowners generally were less receptive to land use planning than nonlandowners. As income levels increased, favorable attitudes toward land use planning tended to decrease.

The majority of the study's respondents in Region VI were of the opinion that the process of land use planning can be used to resolve conflicts; guide the orderly development of local communities; and preserve agricultural lands, environmental quality, and natural resources.

The formulation and implementation of land use policies at the local level of government are favored the most in dealing with broad policy objectives. This emphasizes the desire on the part of the citizens to participate in the decision-making process of government.

The residents surveyed in Region VI were favorable toward seven of nine land use control methods. However, the residents expressed a high level of uncertainty toward many of the land use control methods. The level of residents' uncertainty increased as the land use control method became more complicated or less frequently used in actual planning.

LAND USE PLANNING: AN ANALYSIS OF PEOPLE'S ATTITUDES
IN REGION VI, NORTH DAKOTA

by

Delmer L. Helgeson, Eddie V. Dunn,
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Land use planning is becoming an increasingly important governmental function at the national, state, and local levels. Numerous land use policy measures are introduced each year in Congress and many states are passing bills similar to those introduced at the federal level. Local governments, which derive their authority through enactments of state legislatures, have, in the past, assumed the major responsibilities for land use decisions. Recently, local governments are being involved in the implementation of complex federal and state policies, such as the preservation of environmental quality and growth management. As such, all three levels of government are increasing their role in land use decisions.

The continuous migration of people from rural to urban areas has and is creating problems for both areas. Generally, rural areas are suffering from a decrease in their tax base which may lead to diminished economic activities. Urban areas, on the other hand, have and are feeling the pressures of growth.

The purpose of this study is to provide information on land use planning. The specific objectives are to:

1. Provide a descriptive analysis of the land use planning process.
2. Identify land use problems in State Planning Region VI of North Dakota.
3. Analyze the attitudes of citizens in State Planning Region VI toward land use planning.

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Land Use Planning¹

Land use planning is a legal process by which people living within a given geographic area seek to identify and maintain uses for land that is best suited for local needs.² Land use planning may be used: (1) to protect current land uses, (2) to guide future developments in an orderly fashion, and (3) to minimize present and future land use conflicts.

Three closely related planning processes which contribute to the understanding of land use planning are: (1) land management, (2) project planning, and (3) land use planning.³

Land management refers to land use decisions made by an individual, corporation, or agency over land parcels which they control, own, or manage. Project planning is aimed at the planning of infrastructures.

Land use planning, unlike the other two processes, is carried out only by governmental units. The purpose is to guide decisions over the use of land parcels that are owned, controlled, and operated by individuals, corporations, and governmental agencies. Land use planning is characterized by uncertainty because the decision makers lack not only legal authority over the land parcels, but also adequate information on many relevant factors.

Land management and project planning are concerned with specific land parcels and their uses, under exclusive ownership or control. Land use planning, on the other hand, involves land uses on all land parcels so as to realize a pattern of land use that maximizes welfare and minimizes conflicts in a given community.

The Land Use Planning Process

Land use planning is a legal process, which is continuously and simultaneously involved in four major areas: (1) the grouping of land use issues

¹This is only an abbreviated version of the study on the land use planning process.

²Gessaman, Paul H., The Why and How of Rural Zoning in Nebraska, Extension Service, University of Nebraska, Lincoln.

³Sampson, Neil R., "Will the Real Land Use Planning Please Stand Up?" Journal of Soil and Water Conservation, Vol. 30, September-October, 1975, pp. 207-210.

to help identify the goals and objectives of society or a community, (2) the enactment of legislation to institutionalize the goals and objectives through broadly defined policies, (3) the administration of land use policy by governmental units, and (4) the continual update and evaluation of the land use process.

Hence, the land use planning process proceeds in a cycle of land use issues → implementation of policy → evaluation → and back to issues (Figure 1). However, this classification of the land use planning process is not meant to suggest a rigid hierarchy within the process. The four major elements have highly interrelated, overlapping, and simultaneous characteristics.

Land Use Issues

Four basic categories of land use issues were identified in this study: (1) economic issues, (2) political-legal issues, (3) process-structure issues, and (4) physical soil property issues.⁴

The economic issue basically deals with the efficiency of allocating land among competing uses. Urban sprawl and the preservation of agricultural lands are two important economic issues.

Political-legal issues deal with ways and means of accommodating the public's interest in private land use decisions without undue infringement on individual property rights.

The organizational and institutional structures that are best suited for the administration of land use planning are dealt with under the process-structure issues. Land use decisions are made by a large number of individuals, corporations, and governmental agencies at all levels of government. Hence, the coordination of land use decisions made by such diversified and independent units is crucial.

The study of soil characteristics has differentiated various types of soils that are best suited for specific uses. The preservation of critical areas--such as wetlands, floodplains, wildlife habitat, natural barriers, and prime farmlands--has economic, ecological, and esthetic values. The physical soil property issue deals with ways of using information on soil, climate, and other topographical characteristics in making land use decisions.

⁴Eldridge, Eber, Land Use Issues in the 1970's, Iowa State University, Ames, November 18, 1974.

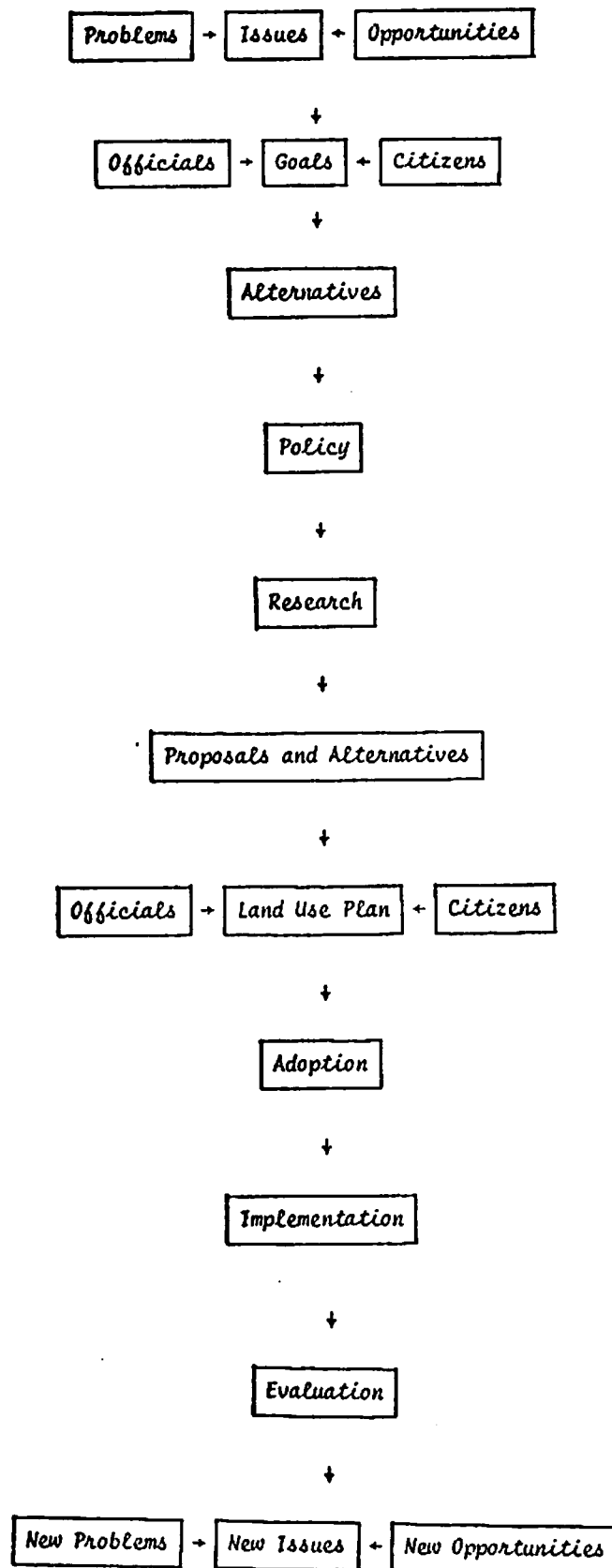


Figure 1. The Land Use Planning Process

Procedures and Methods

A mail survey was used to determine residents' attitudes toward land use problems in Region VI, and the attitude of people toward land use planning. The geographic area from which the sample was drawn is the nine-county area that makes up State Planning Region VI of North Dakota (Figure 2). Region VI is located in south central North Dakota and includes the nine counties of Barnes, Dickey, Foster, Griggs, LaMoure, Logan, McIntosh, Stutsman and Wells. The sample consisted of 10 percent of the year-round residents the region. The sample was divided into four major categories: (1) rural farm (RF)--farms with residential units, (2) rural nonfarm (RNF)--rural communities of less than 2,500 people, (3) urban--communities of 2,500 people and above,⁵ and (4) public officials. Public officials were further broken down into three categories: (1) rural farm, (2) rural nonfarm, and (3) urban.

The rural farm category was further subdivided into three groups: (1) small farms (1-999 acres), (2) medium farms (1,000-1,999 acres), and (3) large farms (2,000 acres and over).⁶ One hundred percent of the elected and appointed officials made up the sample for this strata. The combined sample totaled 2,957 citizens.

A total of 640 usable responses were obtained. Of these respondents 45 percent were rural farm, 29 percent were rural nonfarm, and 25 percent were urban residents. Twenty-two percent of the respondents held an appointed or elected office.

Identification of Land Use Problems: Region VI

Each of the nine counties in Region VI has planning committees that prepared comprehensive plans for the development of their respective counties. These studies include lists of land use problems, goals, and policies. Various land use problems were identified and combined into 11 major groups to be used in the questionnaires from this generalized list.

The 11 land use problems were ranked according to their importance by the participants in the land use planning questionnaire. They were:

1. Pollution of streams,

⁵Definitions of Rural Nonfarm and Urban are those used by the 1969 U.S. Census.

⁶Farm size definitions were arrived at in consultation with the USDA Statistical Reporting Service.

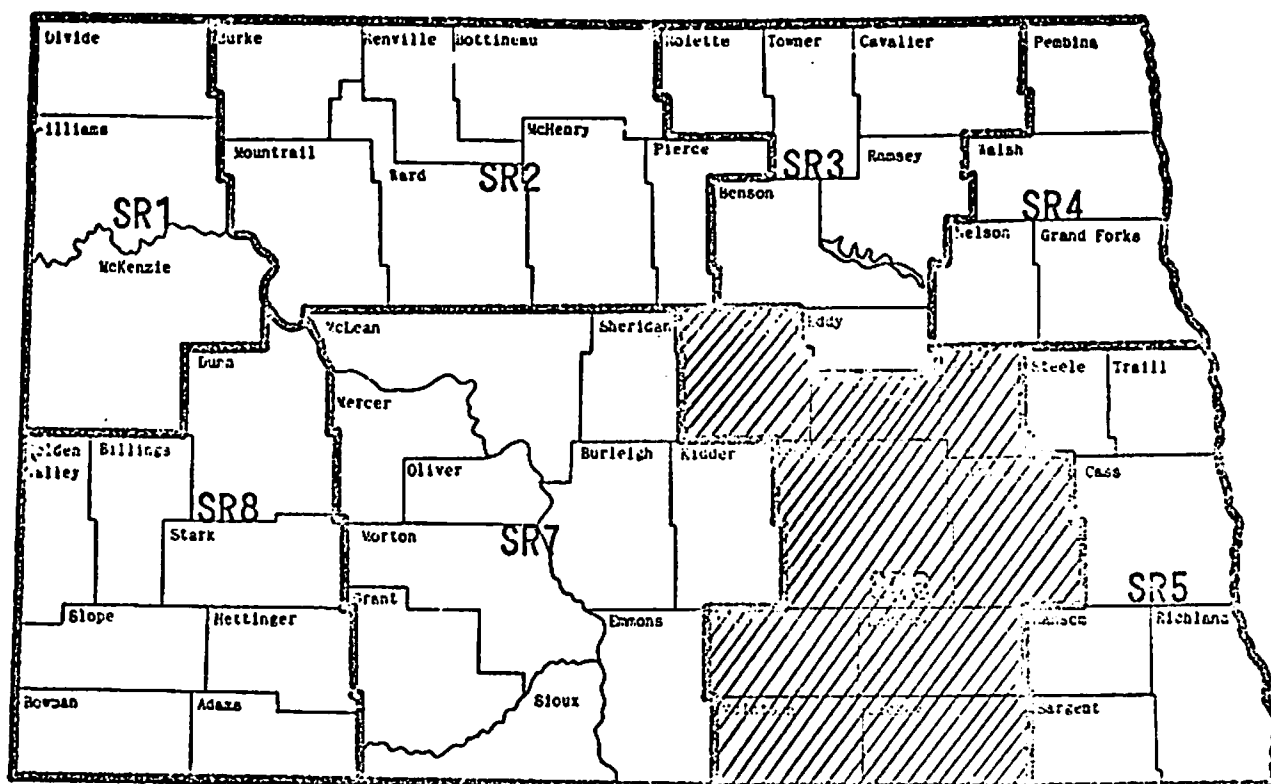


Figure 2. North Dakota State Planning Regions

Study Area



2. Abandoned farmsteads,
3. Inadequate control methods in the use of land,
4. Power line and irrigation conflicts,
5. Lack of adequate farm-to-market roads,
6. Inability to preserve prime agricultural land from urban sprawl,
7. Too many regulations regarding land use,
8. Highway construction without consideration of the impact on private development,
9. Lack of developed space for recreation,
10. Lack of designated space for future expansion of public services, and
11. Inadequate space available for industrial parks.

The first four land use problems were positively identified as problems in Region VI by the respondents. The remaining land use problems were either not considered problems in Region VI or the respondents were undecided. When the 11 land use problems were ranked by sample categories and individual counties, it became apparent that people have different perceptions of the problems, depending upon their place of residence and occupation (Tables 1 and 2).

TABLE 1. LAND USE PROBLEMS RANKED ACCORDING TO MEAN RESPONSES BY MAJOR SAMPLE CATEGORIES, STATE PLANNING REGION VI, NORTH DAKOTA, 1976 -

LAND USE PROBLEMS	SAMPLE CATEGORIES											
	Rural Farm		Rural Nonfarm		Urban		Officials		Nonofficials		Region VI	
	mean ^a	rank ^b	mean ^a	rank ^b	mean ^a	rank ^b	mean ^a	rank ^b	mean ^a	rank ^b	mean ^a	rank ^b
1. Inability to protect prime agricultural land from urban sprawl	2.99*	5	2.88*	7	3.04*	5	2.90*	7	2.99*	6	2.97*	6
2. High voltage power lines across irrigable land . . .	3.22	1	2.91*	6	3.17	4	3.25	2	3.08*	4	3.11	4
3. Abandoned farmsteads	3.08*	3	3.19	3	3.22	3	3.24	3	3.12	2	3.15	2
4. Pollution of streams from farm chemicals, runoffs, and bank erosion	2.90*	7	3.28	1	3.74	1	3.30	1	3.21	1	3.24	1
5. Inadequate space available for industrial parks . . .	2.27	11	2.48	11	2.49	10	2.53	11	2.36	11	2.39	11
6. Highways being built without consideration of their impact on private development	2.85	8	2.85*	9	2.77	8	2.87*	8	2.83	8	2.84	8
7. Lack of adequate farm-to-market roads	3.20	2	3.12*	4	2.74	9	3.16*	5	3.05*	5	3.07*	5
8. Lack of developed space for recreation	2.62	9	2.99*	5	2.86*	7	2.83*	9	2.78	9	2.79	9
9. Lack of designated space for future expansion of public services	2.60	10	2.75	10	2.87*	6	2.91*	6	2.66	10	2.71	10
10. Too many regulations regarding land use	2.92*	6	2.86	8	2.77	8	2.61	10	2.93*	7	2.87	7
11. Lack of adequate control methods in the use of land	3.03*	4	3.20	2	3.25	2	3.21	4	3.11	3	3.13	3

^aA mean value of 3.00 indicates a neutral response. Asterisks (*) indicate mean values that are not significantly different than 3.00. A neutral response implies either the division of respondents on the issue or a high percentage of undecided responses. Usually it is both.

A mean value above 3.00 indicates a higher number and/or intensity of positive responses as to the existence of a problem, while values below 3.00 indicate a higher number and/or intensity of negative responses. As the mean values approach 5.00, the degree of agreement increases. Conversely, as the values approach 1.00 the degree of disagreement increases.

^bThe number and intensity of agreement and disagreement served as the basis for ranking land use problems in Region VI.

TABLE 2. LAND USE PROBLEMS RANKED ACCORDING TO MEAN RESPONSES BY COUNTIES, STATE PLANNING REGION VI, NORTH DAKOTA, 1976

Land Use Problems	County																				Region VI
	Barnes		Dickey		Foster		Griggs		LaMoure		Logan		McIntosh		Stutsman		Wells				
	Mean ^a	Rank ^b	Mean ^a	Rank ^b	Mean ^a	Rank ^b	Mean ^a	Rank ^b	Mean ^a	Rank ^b	Mean ^a	Rank ^b	Mean ^a	Rank ^b	Mean ^a	Rank ^b	Mean ^a	Rank ^b	Mean ^a	Rank ^b	
1. Inability to protect prime agricultural land from urban sprawl	3.12*	5	2.82*	7	2.86*	7	2.80*	5	2.84*	5	3.03*	5	2.93*	4	2.99*	5	3.03*	4	2.97*	6	
2. High voltage power lines across irrigable land	3.29	2	3.08*	4	3.14*	5	3.18*	3	3.24*	2	3.00*	6	2.48	11	3.20	2	2.91*	6	3.11	4	
3. Abandoned farmsteads. . .	3.25	3	31.0*	3	3.11*	6	3.20*	2	3.05*	4	3.13*	3	3.25*	1	3.05*	4	3.28*	1	3.15	2	
4. Pollution of streams from farm chemicals, runoffs, and bank erosion	3.46	1	2.83*	6	3.19*	3	3.38	1	3.46	1	2.95*	7	2.75*	7	3.40	1	3.01*	5	3.24	1	
5. Inadequate space available for industrial parks	2.39	11	2.18	9	2.72*	8	2.25	10	2.22	10	2.84*	9	2.58	10	2.38	11	2.33	9	2.39	11	
6. Highways being built without consideration of their impact on private development	3.01*	7	2.83*	6	2.69*	9	2.98*	4	2.83*	6	2.63	11	2.73*	8	2.84*	7	2.72*	7	2.84	8	
7. Lack of adequate farm-to-market roads	3.11*	6	3.17*	1	3.17*	4	2.85*	7	2.75*	8	3.89	1	3.13*	2	2.90*	6	3.22*	2	3.07*	5	
8. Lack of developed space for recreation . .	2.90*	9	2.96*	5	3.27*	1	2.85*	7	2.44	9	2.87*	8	2.78*	6	2.68	10	2.71*	8	2.79	9	
9. Lack of designated space for future expansion of public services	2.71	10	2.79	8	2.86*	7	2.55	9	2.44	9	2.74*	10	2.63	9	2.81	8	2.71	8	2.71	10	
10. Too many regulations regarding land use . . .	2.99*	8	2.83*	6	2.47	10	2.80*	8	2.76	7	3.05*	4	3.05*	3	2.79	9	3.03*	4	2.87	7	
11. Lack of adequate control methods in the use of land	3.18	4	3.11*	2	3.25*	2	2.89*	6	3.16*	3	3.18*	2	2.90*	5	3.15	3	3.20*	3	3.13	3	

* Indicates values of mean responses that are not significantly different than undecided response (3.00).

^a A mean value above 3.00 indicates a higher number and/or intensity of positive responses as to the existence of a problem, while values below 3.00 indicate a higher number and/or intensity of negative responses. As the mean values approach 5.00, the degree of agreement increases. Conversely, as the values approach 1.00 the degree of disagreement increases.

^b The number and intensity of agreement and disagreement served as the basis for ranking land use problems in Region VI.

Pollution of Streams

Pollution of streams from farm chemicals, runoffs, and bank erosion was identified as the most important problem in Region VI. Of all respondents, 48 percent agreed, 32 percent disagreed, and 20 percent remained undecided that stream pollution was a problem (Figure 3). Pollution of streams was considered the most important problem by urban residents and by rural nonfarm residents, while rural farm residents were undecided whether pollution of streams was a problem.

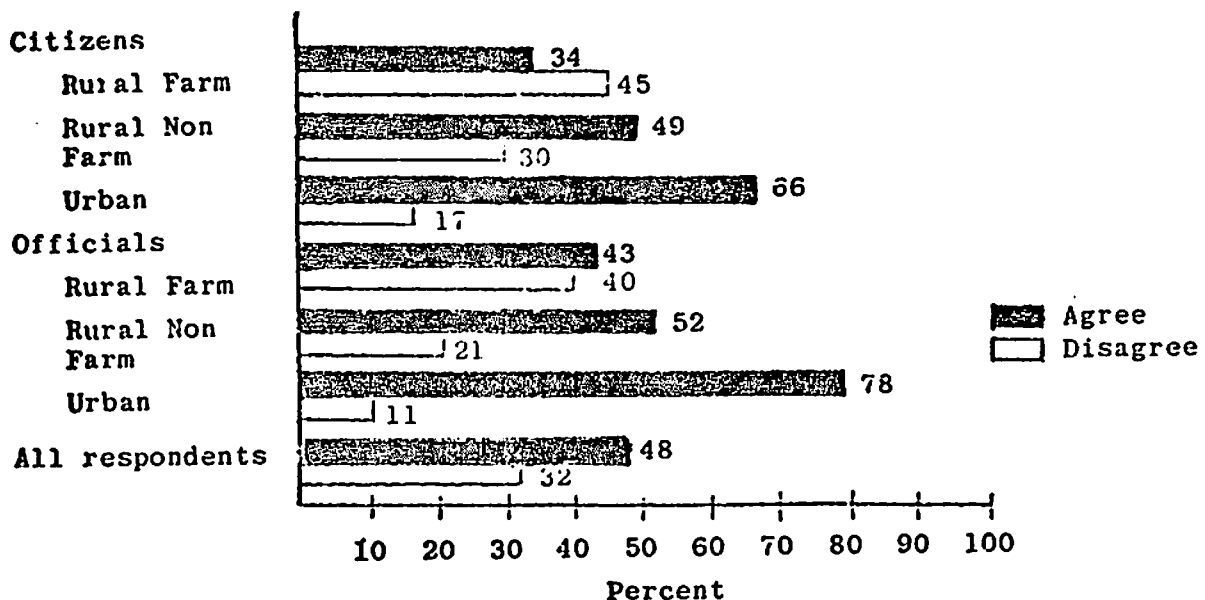


Figure 3. Percent of Respondents Agreeing and Disagreeing with the Statement, "Pollution of Streams from Farm Chemicals, Runoffs, and Bank Erosion is a Problem"

Abandoned Farmsteads

Abandoned farmsteads were considered the second most important problem in Region VI. Of all respondents, 45 percent agreed and 33 percent disagreed abandoned farmsteads posed a problem, while 22 percent remained undecided (Figure 4). There was no significant difference in the degree to which abandoned farmsteads was considered a problem among the residents that made up the different sample categories.

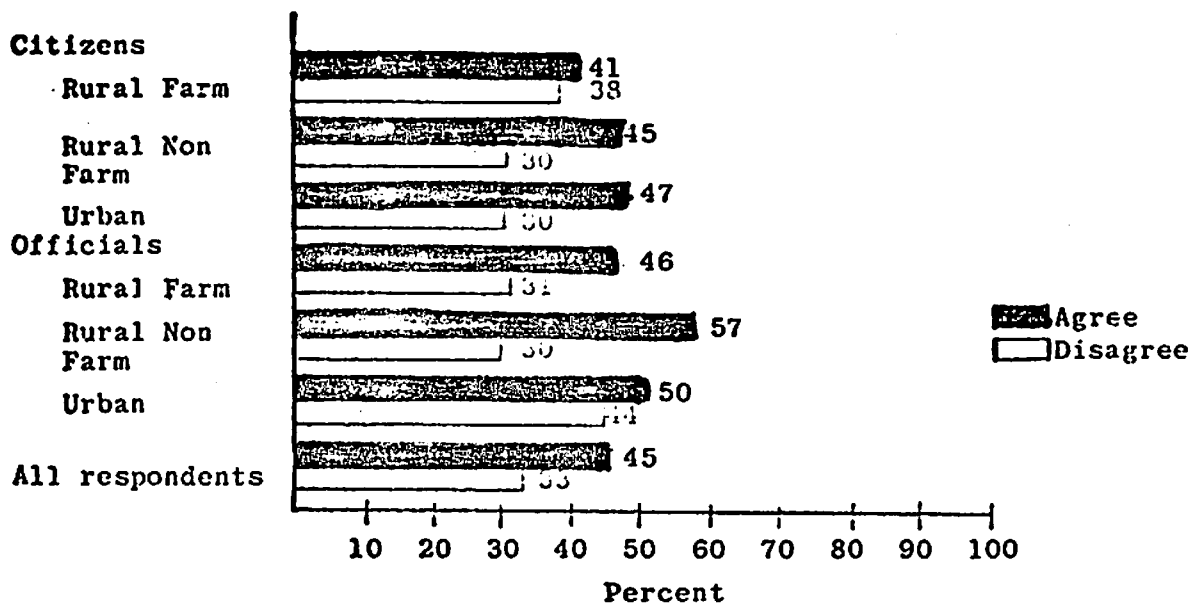


Figure 4. Percent of Respondents Agreeing and Disagreeing with the Statement, "Abandoned Farmsteads Pose Land Use Problems"

Inadequate Control Methods

Lack of adequate control methods in the use of land was considered the third most important problem in Region VI. Of all respondents, 36 percent agreed and 25 percent disagreed that inadequate control methods were a problem, while 39 percent of the respondents remained undecided (Figure 5).

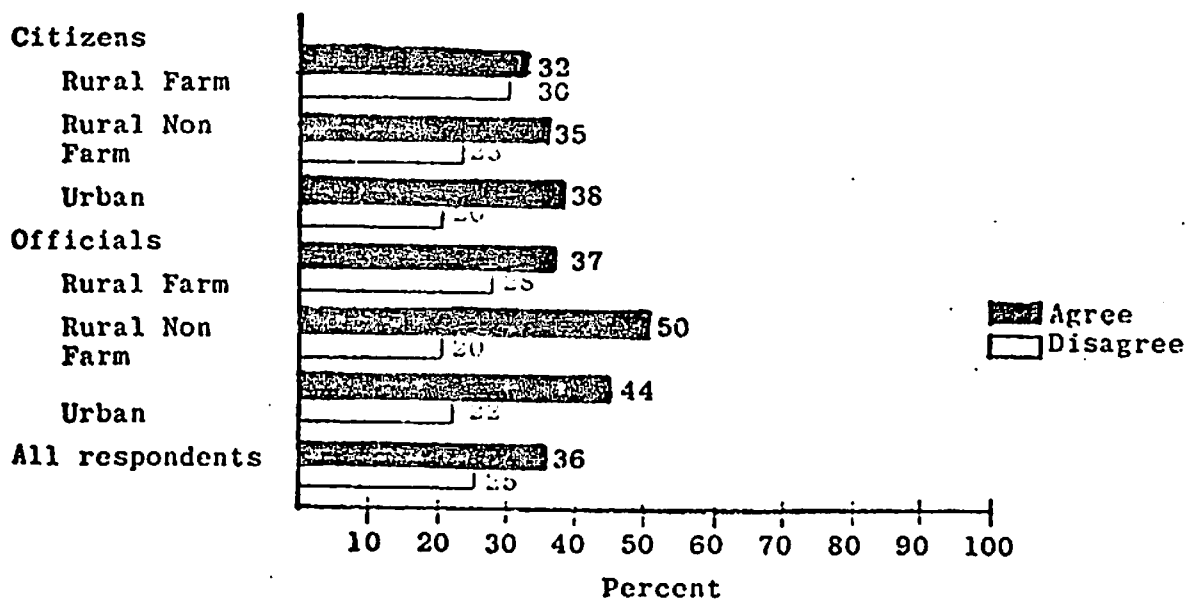


Figure 5. Percent of Respondents Agreeing and Disagreeing with the Statement, "There Is a Lack of Adequate Control Methods in the Use of Land"

Urban residents were more concerned over the lack of adequate control methods than the residents of rural farms. A large portion of the respondents were undecided toward this problem, indicating residents may be unfamiliar with the various land use control methods. Respondents that have participated in land use planning activities placed a higher level of importance on the problem of inadequate control methods than did nonparticipants.

Power Line and Irrigation Conflicts

The land use problems anticipated from the construction of high voltage power lines across farmlands include disruption of land use patterns with serious economic consequences through fragmentation of irrigation systems over land with irrigation potential. Reduction in the scenic quality of the region is another problem that was frequently cited.

The impending construction of high voltage power lines across irrigable lands was ranked as the fourth most important problem in Region VI. Of all respondents, 40 percent agreed, 34 percent disagreed, and 26 percent remained undecided that power lines posed a land use problem (Figure 6).

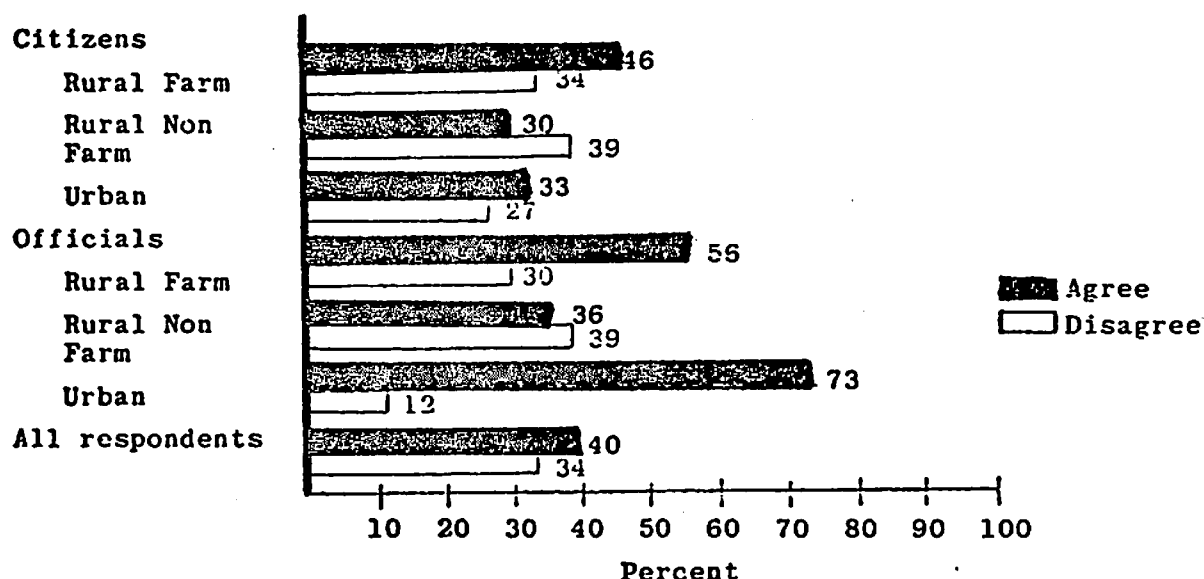


Figure 6. Percent of Respondents Agreeing and Disagreeing with the Statement, "High Voltage Power Lines Across Irrigable Land Will Pose Problems"

The impending construction of high voltage power lines across irrigable lands was considered to be more significant among urban officials and rural farm residents. According to the residents of rural farms, power lines posed the most important problem in the region. Urban officials placed the highest importance on the problems posed by power lines compared to the responses of all other sample categories.

Problem localization (the tendency of people to consider problems which affect them directly to be more important than those which are less direct or of which they are less aware) was found to exist in the ranking of problems according to the major sample categories and, to some extent, in the ranking of problems according to individual counties. For example, lack of developed space for recreation was considered the ninth most important problem in Region VI by all respondents, while it was considered the fifth most important problem by rural nonfarm residents. However, the residents of Foster County considered lack of developed space for recreation as the single most important problem.

Pollution of streams from farm chemicals, runoffs, and bank erosion was considered the most important problem among all categories except rural farm, where it is considered the seventh most important problem of the region.

The level of importance given to problems by the officials and the general public within the region was considerably different toward three problems: (1) inadequate space available for industrial parks, (2) lack of designated space for future expansion of public services, and (3) too many regulations regarding land use. Neither public officials nor nonofficials felt that inadequate space for industrial development parks or lack of space for future expansion of public services were important problems in Region VI. In addition, public officials did not consider that there were too many regulations regarding land use compared to the neutral response of nonofficials. The land use problems perceived by residents appeared to depend on their place of residence and occupation.

Analysis of Attitudinal Survey Results

Residents of Region VI were highly favorable toward land use planning, with strict qualifications regarding the extent of its practical implementation. The residents were of the opinion that land use planning

could be effective in avoiding conflicts between landowners and the general public (Figure 7), as well as to preserve prime agricultural lands from urban development. They perceived the preservation of prime agricultural lands as a desirable policy objective, even though conversion of agricultural lands into more intensive uses was identified as a low priority problem in the region. Conversion of prime agricultural lands into more intensive use was ranked the sixth most important problem in Region VI.

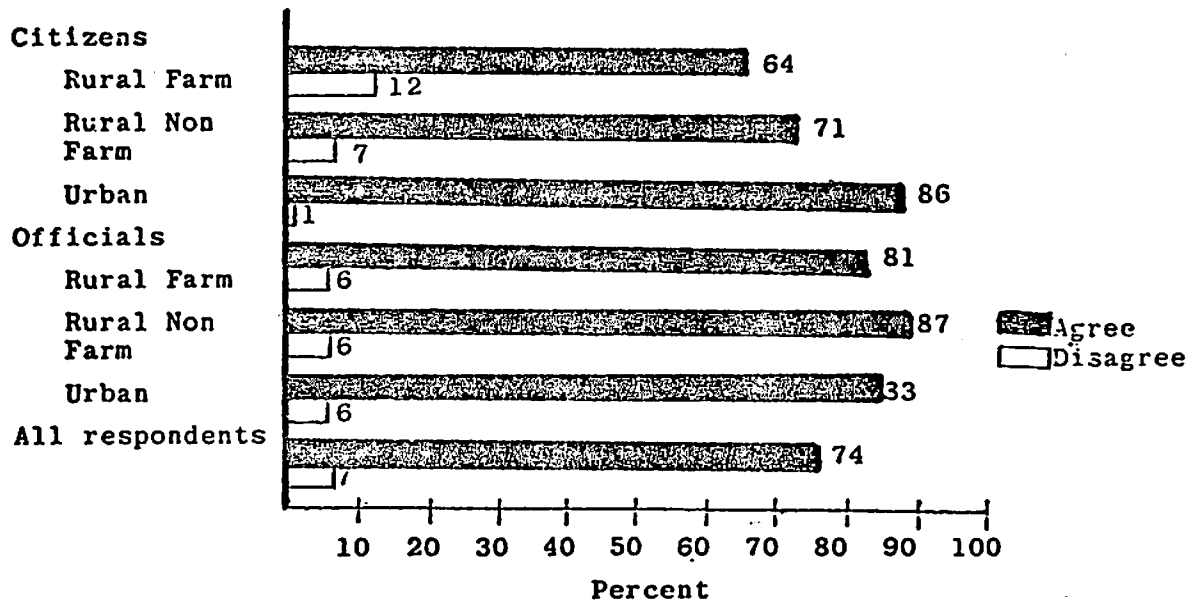


Figure 7. Percent of Respondents Agreeing and Disagreeing with the Statement, "Land Use Planning Can Be Effective in Avoiding Conflicts Between Landowners and the Public"

In addition, the residents of the region favored land use planning even though they did not perceive serious land use issues in the region. However, the residents were of the opinion that the supply of land in North Dakota was not adequate for all desired uses. They felt there should be regional interest in land use planning despite the decreasing population in Region VI (Figure 8).

The highly favorable attitudes held toward land use planning were seriously compromised by attitudes expressed toward property rights. For example, residents of Region VI were of the opinion that ownership of land should allow absolute individual rights as to how that land may be used (Figure 9). The citizens of rural farms were highly protective of property rights compared to other sample categories.

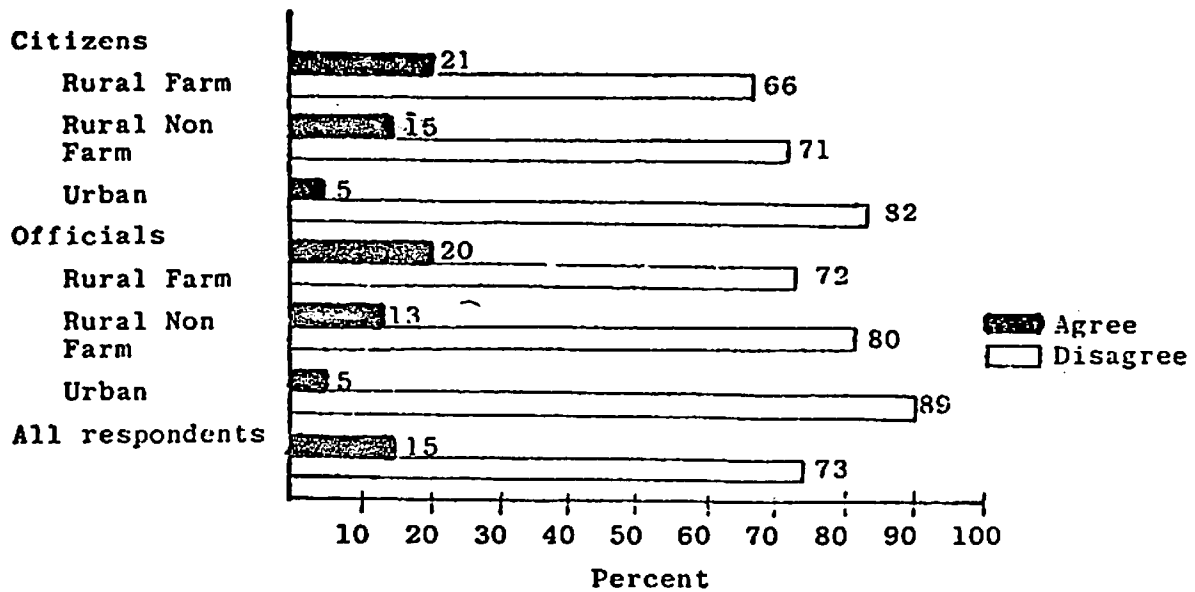


Figure 8. Percent of Respondents Agreeing and Disagreeing with the Statement, "With Population Declining in Your Area, There Is No Need to Be Concerned About Land Use Planning"

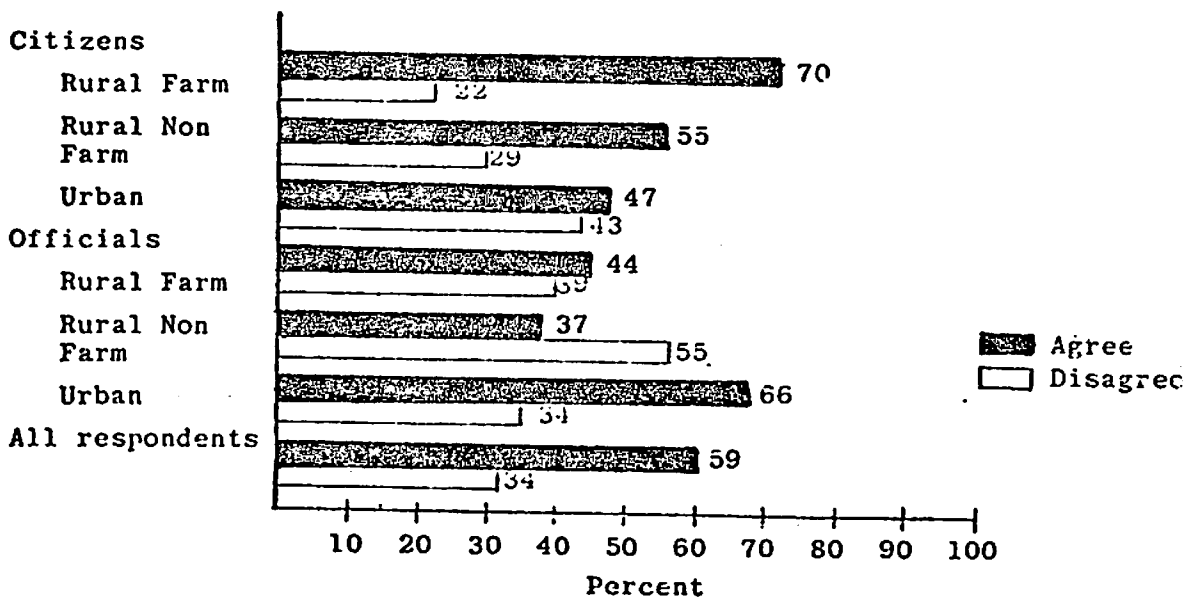


Figure 9. Percent of Respondents Agreeing and Disagreeing with the Statement, "Ownership of Land Should Allow Absolute Individual Rights as to How That Land May Be Used"

However, the extent to which residents were on guard against undue infringements of property rights became more intense and unanimous depending on the level of threat they perceived to their individual property rights. Legal requirements compelling landowners to consider the rights of others in the use of their land was highly favored among all sample categories (Figure 10). But as the legal requirements became more restrictive, ranging

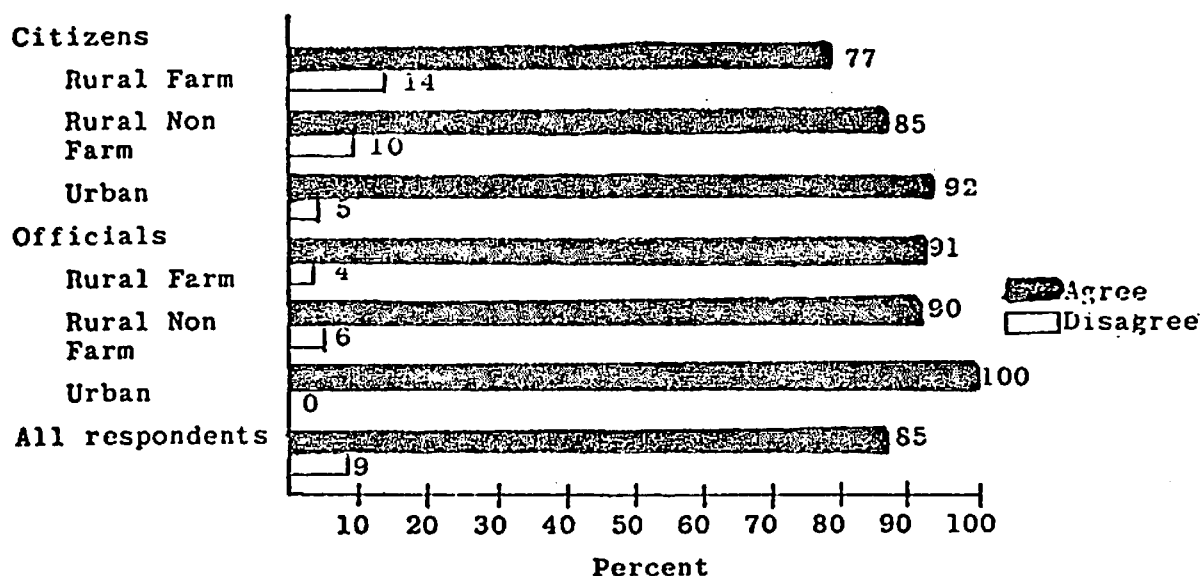


Figure 10. Percent of Respondents Agreeing and Disagreeing with the Statement, "An Individual Should Be Required by Law to Consider the Rights of Neighboring Landowners and the Public Interest in Community Health and Safety when Using His Land"

from governmental control of land use to the use of eminent domain to acquire private land, attitudes toward the implementation of controls became more negative (Figures 11 and 12). This contradicted the generally high favorable response toward legal requirements. The residents of Region VI seemed reluctant to accept land use planning if it could not be reconciled with individual rights to property.

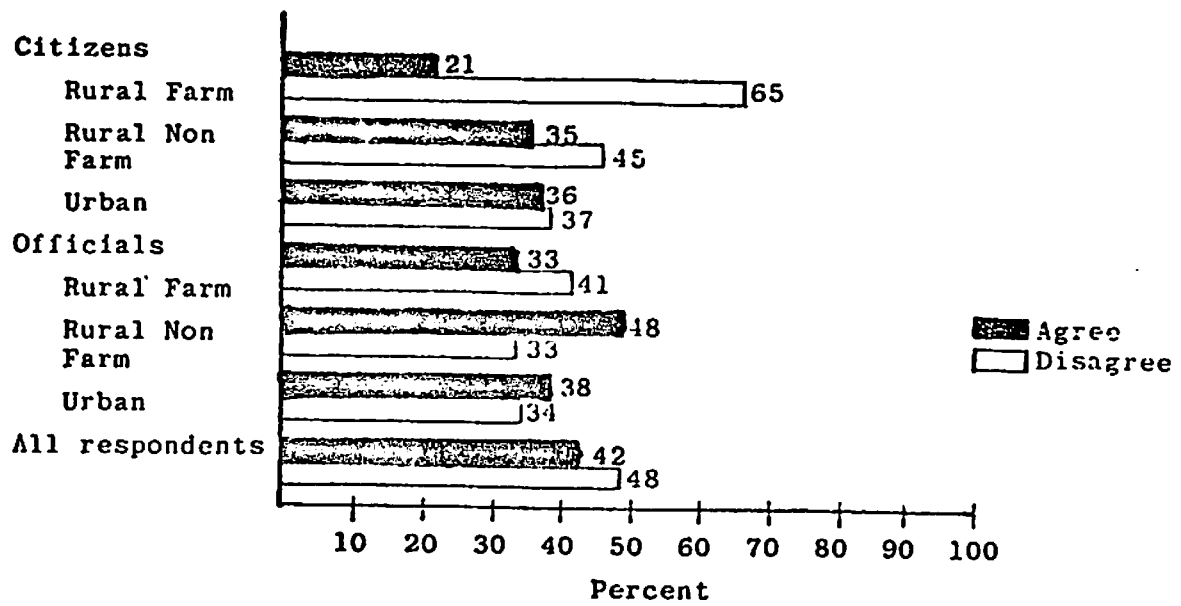


Figure 11. Percent of Respondents Agreeing and Disagreeing with the Statement, "The Government Should Have the Right to Control Land Use in the Interest of Public Health, Safety, Morals, or General Welfare"

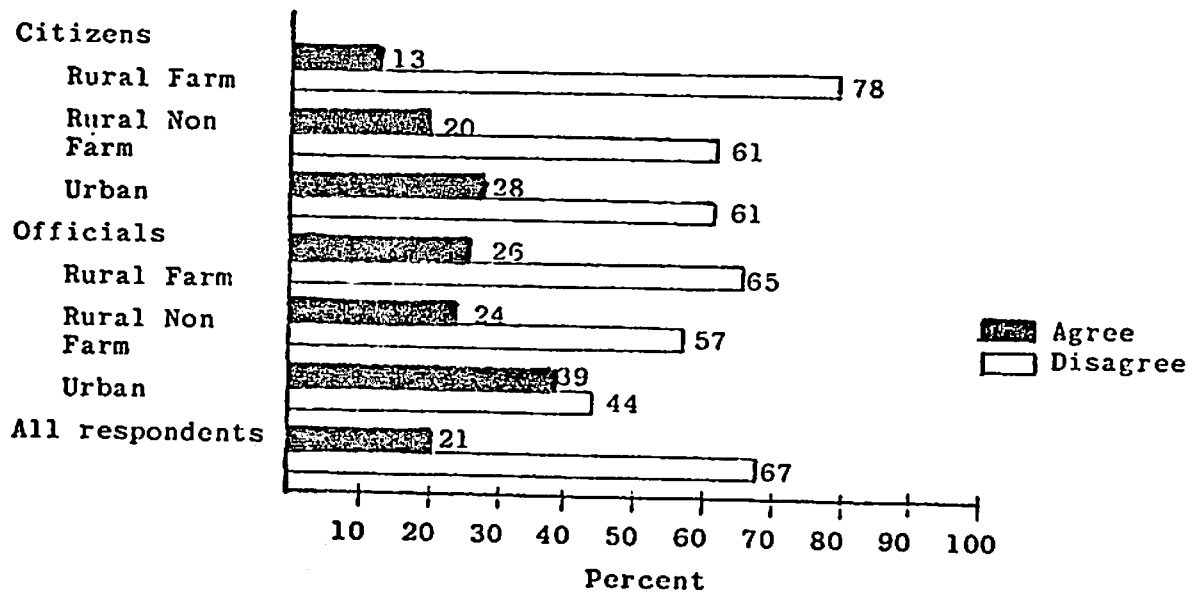


Figure 12. Percent of Respondents Agreeing and Disagreeing with the Statement, "The Government Should Have the Right to Claim Any Land for Public Use So Long as Just Compensation Is Paid to Landowners"

The residents of Region VI seemed to favor indirect and flexible control methods for the implementation of land use policies. The respondents were highly unfavorable toward the market price as the only factor that determines the use of land (Figure 13). This implies that residents see a need for a supplement to be used with the market price factor in allocating land among uses.

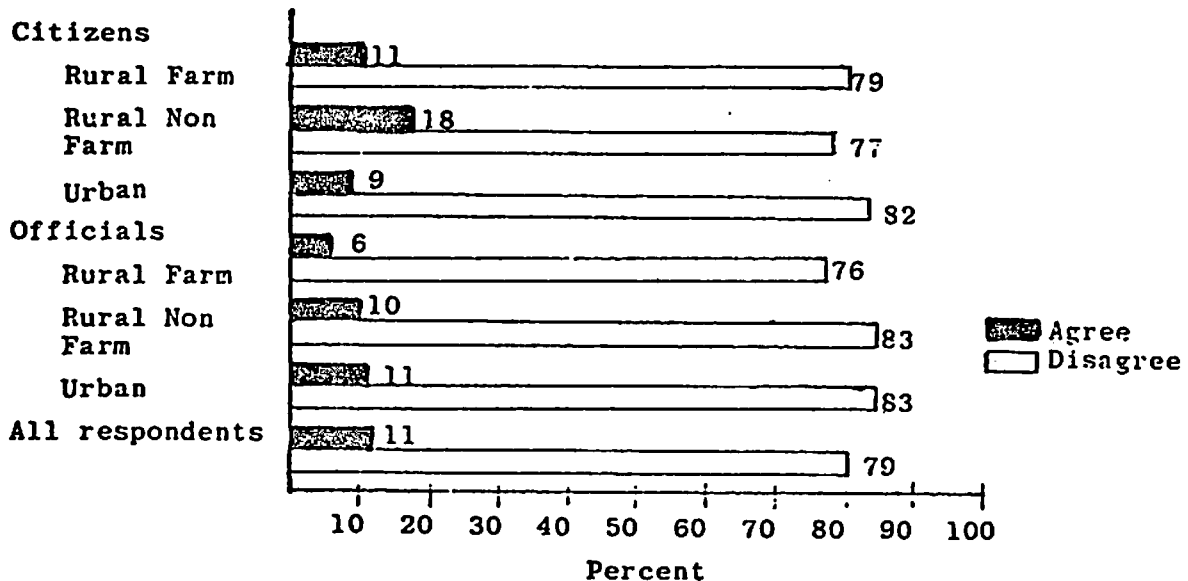


Figure 13. Percent of Respondents Agreeing and Disagreeing with the Statement, "Market Prices Should Be the Only Factor Which Determines How Land Should Be Used"

Conflicting Values

Conflict of values was found in the responses of residents regarding possible compensation of landowners for the depreciation of their land value due to land use regulations and the taxation of those whose land value appreciates as a result of the same land use regulations. The residents of Region VI were highly in favor of compensating landowners whose land value depreciates due to land regulations (Figure 14). On the other hand, respondents objected to the sharing of windfall gains between the property owner and the public sector (Figure 15).

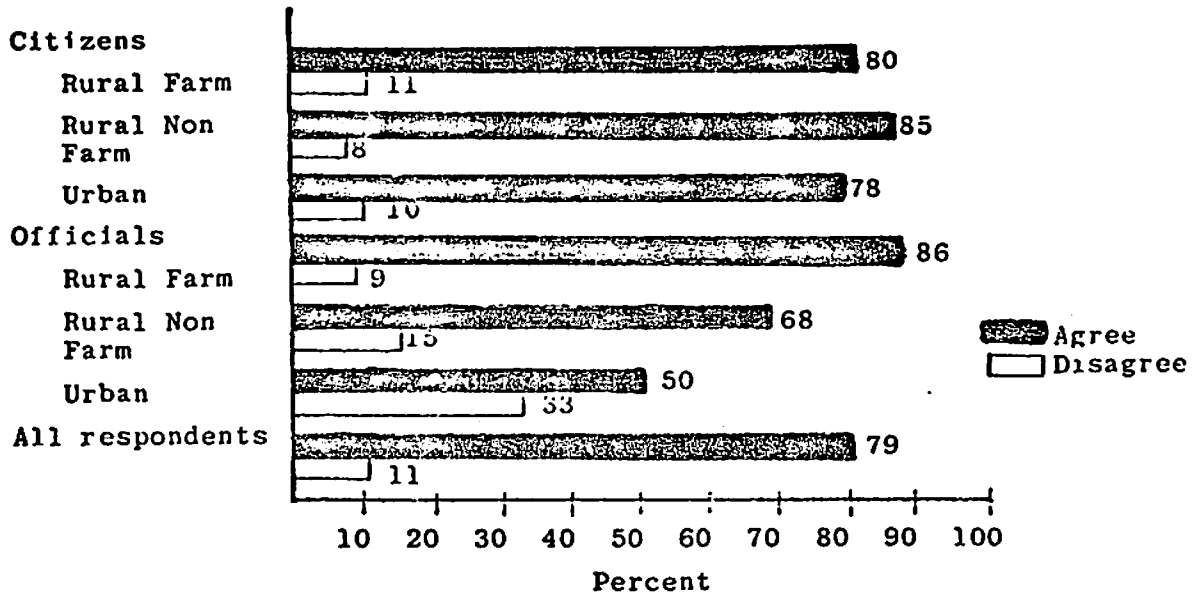


Figure 14. Percent of Respondents Agreeing and Disagreeing with the Statement, "If Land Use Controls (Such As Zoning, Building Codes, and Nuisance Controls) Decrease the Value of Land, the Landowner Should Be Compensated for the Loss"

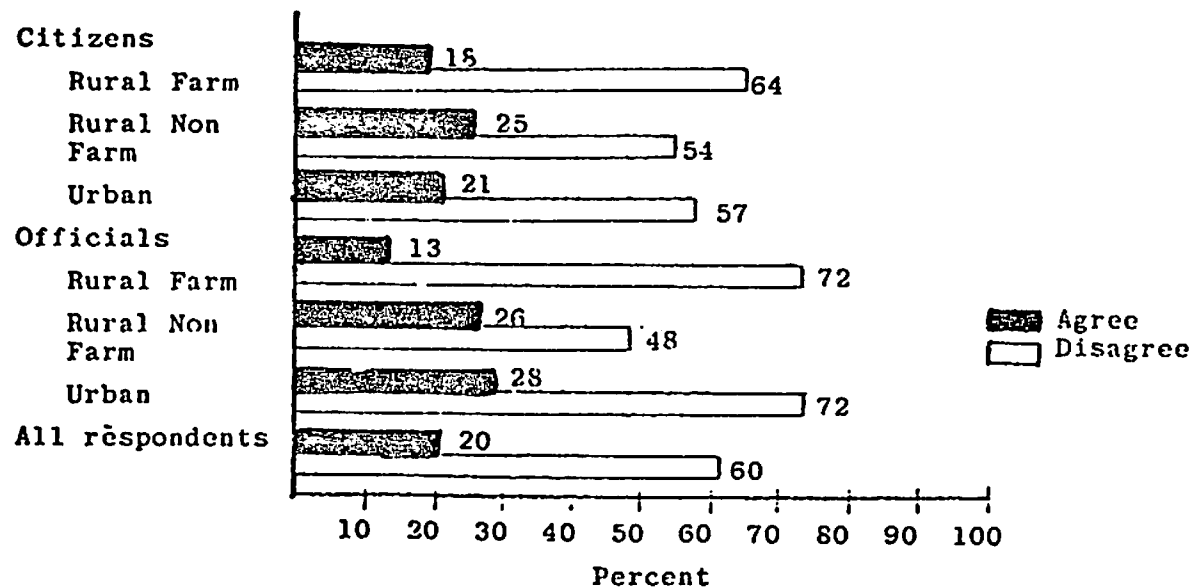


Figure 15. Percent of Respondents Agreeing and Disagreeing with the Statement, "If the Value of Land Increases Due to Public Actions (Such As Zoning, Highways), the Increase in Value Should Be Shared by the Public"

Formulation and Implementation of Land Use Policy

The implementation of policy was more favored at the local level of government than at the regional or state level (Figure 16). Residents of Region VI expressed strong disagreement toward the statement favoring the administration of land use policy at the federal level of government. The lowest percentage of disagreement and undecided responses was found on statements favoring involvement of the local level of government.

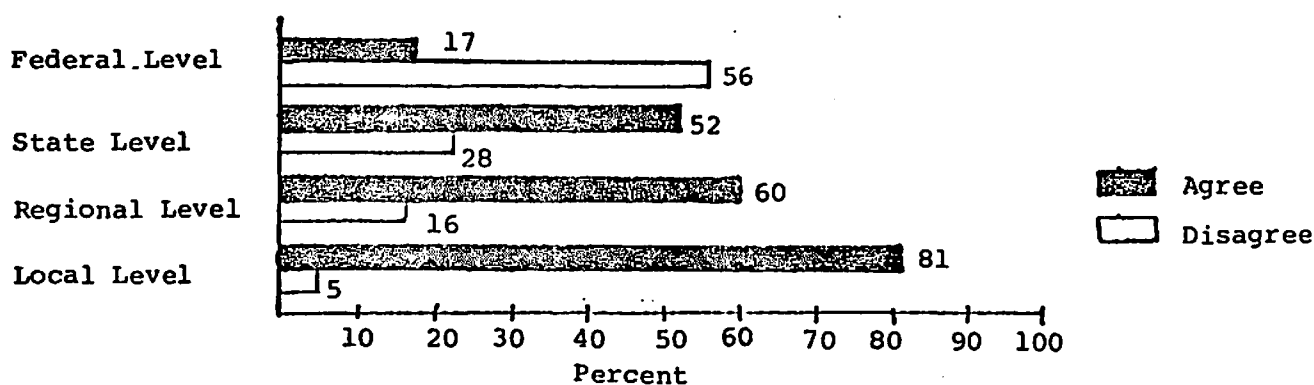


Figure 16. Percentage Response of All Respondents Toward the Statement, "The Initiation and Design of Land Use Planning Should Take Place at the Federal, State, Regional, or Local Levels"

The implementation of land use policy at the regional level was favorable to the residents of Region VI. However, the level of support given to the regional level was much lower than that of the local government, and comparable with that of the state government.

Local Government

The consistent and overwhelming preference of the formulation and administration of land use policies at the local level of government compared to higher levels emphasized the desire on the part of the citizens to actively participate in the decision-making process of government. The proximity of the local government was not only conducive to citizen participation, but also allowed daily personal contact between public officials and citizens. Land use decisions reached at the local level were felt to be more reflective

of actual community needs and objectives, since they are made by officials and citizens whose interests are identified with the community, and who are perceived as relatively more knowledgeable about the needs of the specific local community.

Public officials of the region were highly favorable toward efforts for more cooperation and coordination among local governments, as well as between the private and public sectors, to avoid duplication and conflicts (Figure 17). The officials considered the state government as the best source of financial and technical assistance for regional and local land use planning organizations.

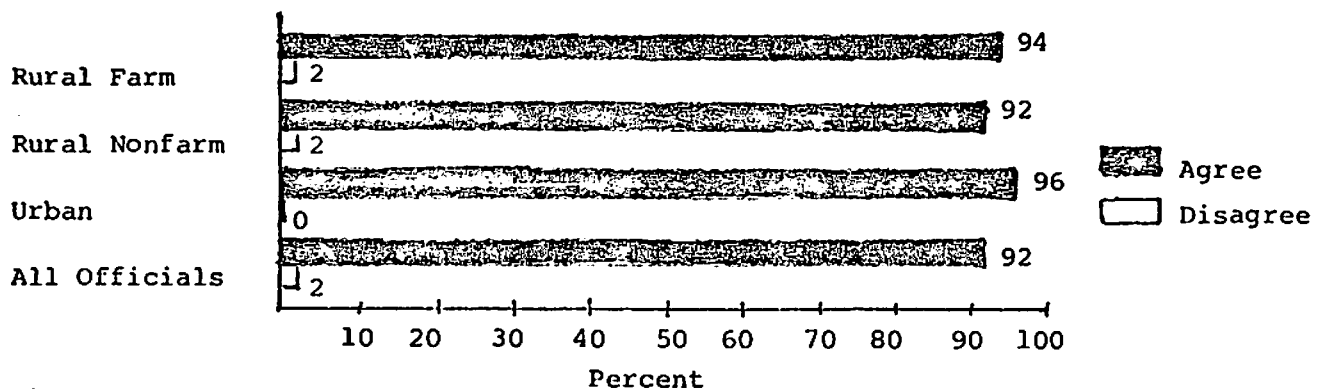


Figure 17. Percentage Response of Public Officials Regarding the Need for More Cooperation in Making Land Use Decisions Between Local Governments and Between the Private and Public Sectors

Residents disagreed that there were sufficient community organizations to reflect and protect the interests of the general public in regard to land use decisions. There was overwhelming agreement that such organizations should be created (Figure 18). There was also agreement by all categories that land use plans should not be adopted without the final approval of local citizens (Figure 19).

A measure of sincerity, on the part of the residents, to participate in and influence land use decisions was reflected in the favorable attitudes that were found toward educational programs (Figure 20) that will help them understand land use problems. Favorable attitudes were also expressed toward educational programs which would explain the rights and responsibilities of citizens in the land use planning process. In general, officials and

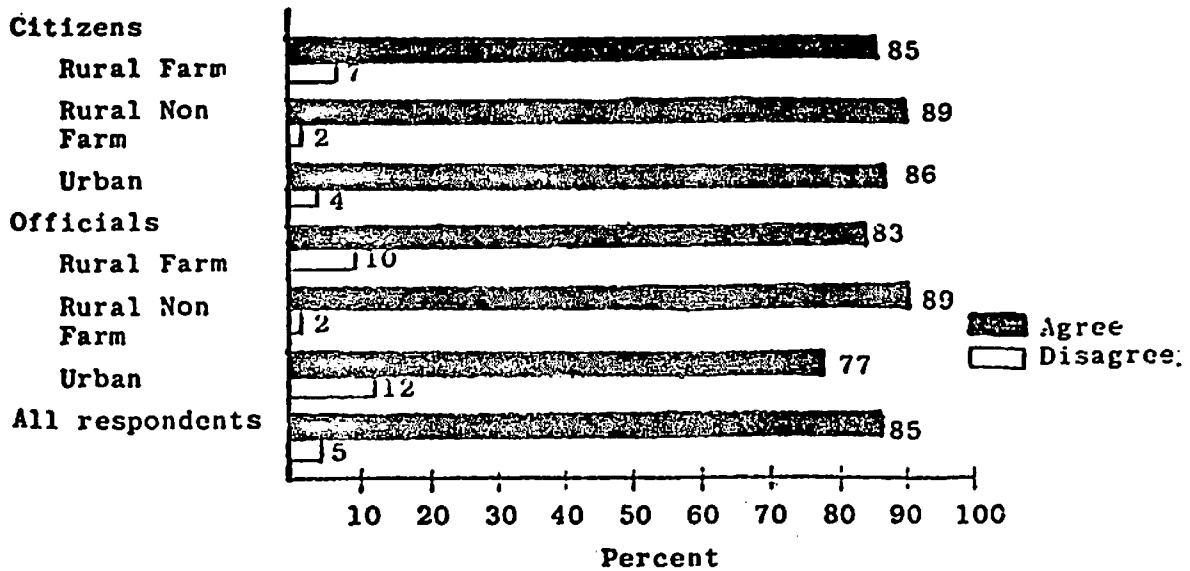


Figure 18. Percent of Respondents Agreeing and Disagreeing with the Statement, "There Should Be a Community Organization that Makes Sure Citizens' Interests Are Considered in All Local Land Use Decisions"

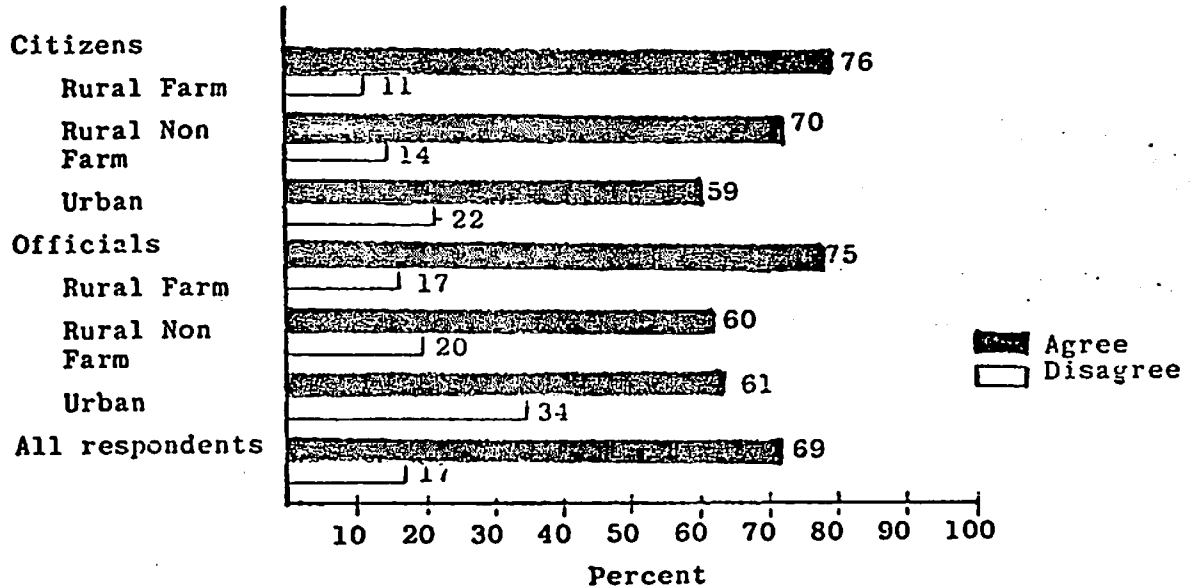


Figure 19. Percent of Respondents Agreeing and Disagreeing with the Statement, "Land Use Plans Should Be Adopted Only with the Approval of the Local Citizens"

participants in land use planning activities had more favorable attitudes toward land use planning than respondents whose awareness of land use issues were assumed to be lower (nonofficials and nonparticipants in land use planning activities).

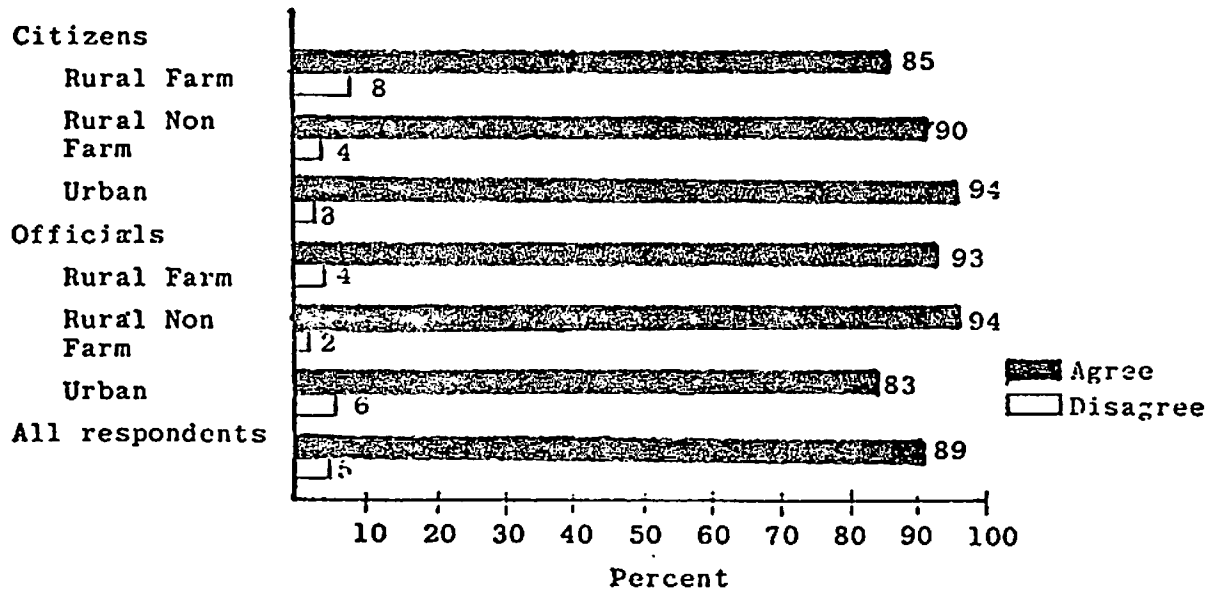


Figure 20. Percent of Respondents Agreeing and Disagreeing with Educational Programs that Will Help Local Citizens Understand Land Use Problems and Opportunities, As Well As Their Rights and Responsibilities in the Land Use Planning Process

State Government

Attitudes of the respondents were favorable toward the formulation and implementation of policy at the state level of government. However, the respondents did not favor legislation to force land use planning. The respondents' level of support toward the involvement of state government in policy making was much lower than it was toward local government involvement. The state government was the most favored level as a source of financial and technical assistance for regional and local land use planning organizations (Figure 21).

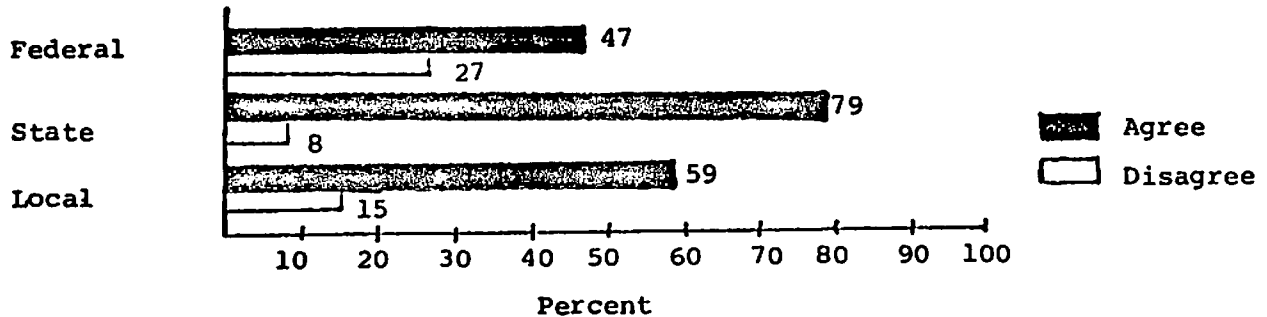


Figure 21. Percentage Response of All Officials Regarding the Level of Government that Should Provide Financial and Technical Assistance to Regional and Local Land Use Planning Agencies

Federal Government

Favorable attitudes toward the federal government in the formulation of land use policies were limited to broad objectives, such as environmental quality and preservation of natural resources. Even this support was highly limited. Attitudes were highly unfavorable toward the implementation of land use policy at the federal level.

Land Use Control Methods

The study of attitudes toward control methods was undertaken to identify the level of residents' understanding of controls, as a means for determining educational needs. The residents were asked if they felt that these land use control methods could be effective in their area. The nine land use control methods listed and a definition of each are:

1. Zoning: This is a legal process whereby the local government regulates the type and intensity of land use within some specified geographic area.
2. Subdivision regulations: These specify conditions for the division of land into lots in order to guide the layout and location of new developments.
3. Building codes: These regulations establish minimum standards for types of construction, installation of plumbing, electrical work, fire protection, etc.
4. Nuisance control ordinance: These regulate land use activities that cause inconvenience to people (such as noise, odor, smoke, dust, fire, heat, etc.).

5. Agricultural district: Farmers petition local governments (county, city, townships, etc.) to set aside and protect land for agricultural purposes.
6. Public services: If it is desired to discourage development from certain parts of a community, public services (such as roads, water, etc.) will not be provided for those areas.
7. Open space legislation: This is a tax incentive designed to encourage the preservation of farm or other open space lands. The idea is to tax landowners on the basis of the income earned by the land, instead of its market value.
8. Marginal cost pricing: This method is designed to discourage scattered developments that increase the cost of public services. For example, a person who wants to build a house 10 miles out of town will pay more for water than a person who wants to build a house 5 miles out of town because the one living 10 miles from town requires more public money for pipes, labor, and maintenance than the one living 5 miles closer.
9. Transferable development rights: Under this method landowners are given "development rights," a form of license to develop land. A limited number of rights are issued for a given area. If someone wants to develop his land more than he is allowed by the development rights, he would have to buy development rights from other landowners. This way the amount of development in a given area is limited, while all landowners can share the benefits of the development.

The residents of Region VI were favorable toward seven of the nine control methods considered (Figure 22). The remaining two control methods, the withholding of public services and transferable development rights, drew overall undecided responses.

Even though overall responses were favorable, the residents of Region VI expressed a high level of uncertainty toward seven of the nine control methods. Total undecided responses ranged from a low of 12 percent toward building codes to a high of 46 percent toward transferable development rights. The level of residents' uncertainty increased as the land use control methods became more complicated or scarcely used in actual planning.

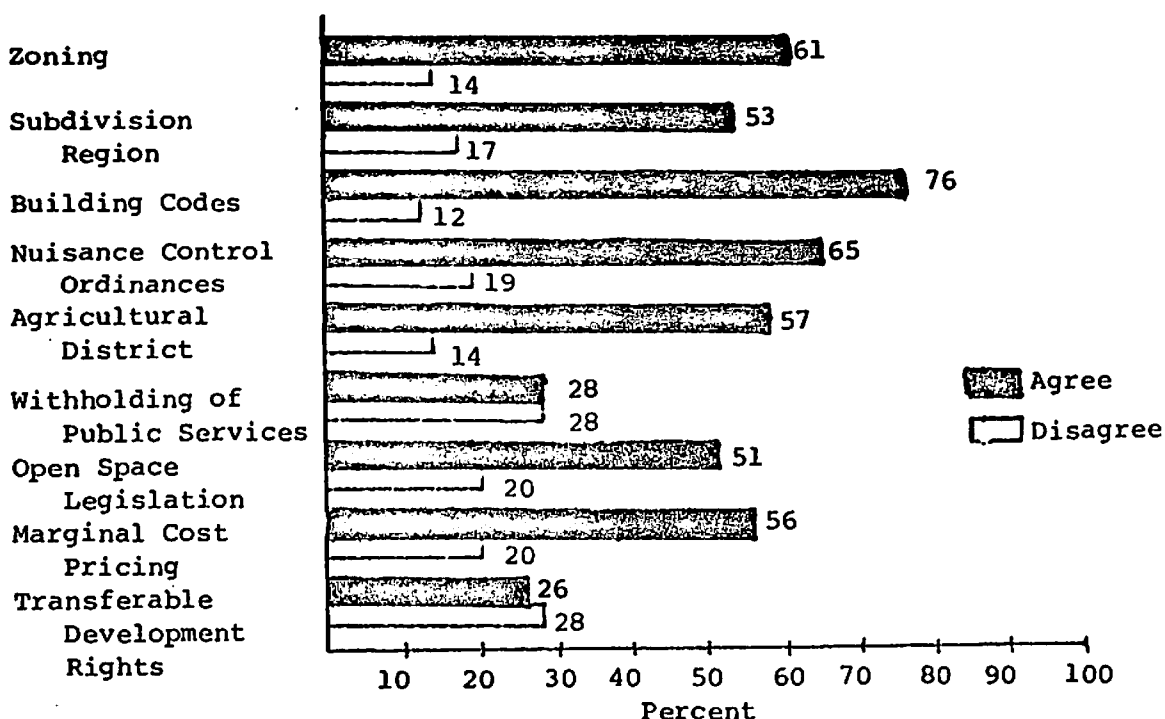


Figure 22. Percent of Respondents Agreeing and Disagreeing that These Land Use Control Methods Could Be Effective in Their Area

The regulatory land use control methods--zoning, subdivision regulations, building codes, and nuisance control ordinances--are the oldest and most commonly used for planning purposes. As such, the residents of Region VI appeared to be more familiar with the regulatory controls than the other more technical and less used ones, as indicated in the low level of undecided responses.

The high level of undecided responses indicated a relative unfamiliarity toward the five remaining land use control methods. These control methods are relatively recent planning techniques whose effectiveness is still in question. Although the five remaining land use control methods were generally more desirable than undesirable, the responses are best utilized for educational purposes.

List of Tables

<u>Table No.</u>		<u>Page</u>
1.	LAND USE PROBLEMS RANKED ACCORDING TO MEAN RESPONSES BY MAJOR SAMPLE CATEGORIES, STATE PLANNING REGION VI, NORTH DAKOTA, 1976	7
2.	LAND USE PROBLEMS RANKED ACCORDING TO MEAN RESPONSES BY COUNTIES, STATE PLANNING REGION VI, NORTH DAKOTA, 1976 . .	8

List of Figures

<u>Figure No.</u>		<u>Page</u>
1.	The Land Use Planning Process.	4
2.	North Dakota State Planning Regions.	6
3.	Percent of Respondents Agreeing and Disagreeing with the Statement, "Pollution of Streams from Farm Chemicals, Runoffs, and Bank Erosion Is a Problem".	9
4.	Percent of Respondents Agreeing and Disagreeing with the Statement, "Abandoned Farmsteads Pose Land Use Problems" .	10
5.	Percent of Respondents Agreeing and Disagreeing with the Statement, "There Is a Lack of Adequate Control Methods in the Use of Land".	10
6.	Percent of Respondents Agreeing and Disagreeing with the Statement, "High Voltage Power Lines Across Irrigable Land Will Pose Problems"	11
7.	Percent of Respondents Agreeing and Disagreeing with the Statement, "Land Use Planning Can Be Effective in Avoiding Conflicts Between Landowners and the Public". . .	13
8.	Percent of Respondents Agreeing and Disagreeing with the Statement, "With Population Declining in Your Area, There Is No Need to Be Concerned About Land Use Planning". . . .	14
9.	Percent of Respondents Agreeing and Disagreeing with the Statement, "Ownership of Land Should Allow Absolute Individual Rights as to How That Land May Be Used"	14
10.	Percent of Respondents Agreeing and Disagreeing with the Statement, "An Individual Should be Required by Law to Consider the Rights of Neighboring Landowners and the Public Interest in Community Health and Safety when Using His Land".	15

List of Figures (continued)

<u>Figure No.</u>		<u>Page</u>
11.	Percent of Respondents Agreeing and Disagreeing with the Statement, "The Government Should Have the Right to Control Land Use in the Interest of Public Health, Safety, Morals, or General Welfare"	16
12.	Percent of Respondents Agreeing and Disagreeing with the Statement, "The Government Should Have the Right to Claim Any Land for Public Use So Long as Just Compensation Is Paid to Landowners.	16
13.	Percent of Respondents Agreeing and Disagreeing with the Statement, "Market Prices Should Be the Only Factor which Determines How Land Should Be Used"	17
14.	Percent of Respondents Agreeing and Disagreeing with the Statement, "If Land Use Controls (Such as Zoning, Building Codes, and Nuisance Controls) Decrease the Value of Land, the Landowner Should Be Compensated for the Loss"	18
15.	Percent of Respondents Agreeing and Disagreeing with the Statement, "If the Value of Land Increases Due to Public Actions (Such as Zoning, Highways), the Increase in Value Should Be Shared by the Public"	18
16.	Percentage Response of All Respondents Toward the Statement, "The Initiation and Design of Land Use Planning Should Take Place at the Federal, State, Region, or Local Levels"	19
17.	Percentage Response of Public Officials Regarding the Need for More Cooperation in Making Land Use Decisions Between Local Governments and Between the Private and Public Sectors.	20
18.	Percent of Respondents Agreeing and Disagreeing with the Statement, "There Should Be a Community Organization that Makes Sure Citizens' Interests Are Considered in All Local Land Use Decisions"	21
19.	Percent of Respondents Agreeing and Disagreeing with the Statement, "Land Use Plans Should Be Adopted Only with the Approval of the Local Citizens"	21
20.	Percent of Respondents Agreeing and Disagreeing with Educational Programs that Will Help Local Citizens Understand Land Use Problems and Opportunities, As Well As Their Rights and Responsibilities in the Land Use Planning Process.	22

List of Figures (continued)

<u>Figure No.</u>		<u>Page</u>
21.	Percentage Response of All Officials Regarding the Level of Government that Should Provide Financial and Technical Assistance to Regional and Local Land Use Planning Agencies	23
22.	Percent of Respondents Agreeing and Disagreeing that These Land Use Control Methods Could Be Effective in Their Area	25