

PROGRAM ISSUES IN IMPROVING THE QUALITY OF SLOVENE RURAL LIFE

Theodore Buila

I. INTRODUCTION¹

Entering the 1970s there was a growing public awareness in Slovenia concerning the quality of village life. Decaying villages, degradation of the environment and a concern for the "people left behind" were some of the issues that had been added to the agricultural policy debate that had been dominated for twenty years by the twin problems of agricultural socialization and agricultural self sufficiency. This awareness was to precipitate serious discussion both within and outside the "agricultural sector" aimed at establishing an extension organization to service rural Slovenia.²

The body of this article is an institutional response (the Biotechnical Faculty - BF) to provide an up-to-date opinion reading—where none existed—concerning program dimensions and target audiences, as perceived by three of the prime groups to be involved in the discussion: private farmers, agronomists and legislators. Project study preparations were initiated in January, 1972 by the BF staff.

It became clear during the study planning phase that deliberations concerning specific institutional responsibilities and the question of finances (and program priorities) might not bear fruit for several years in the form of an integrated rural extension service. Prompted by requests from agronomists employed by agricultural cooperatives (KZ's) and agricultural *kombinats* (KIK's), farmer profile identification was included for the purpose of identifying farmer-level information that might lead to improving KZ/KIK effectiveness.

II. STUDY PROCEDURES

The research activity addressed the questions of framing the program issues/dimensions and the client population to be serviced. Specifically, there were four

research questions:

- (1) Identification of program issue/dimensions, priorities,
- (2) Identification of audience/client population priorities,
- (3) Identification of specific program priorities to improve the quality of village life,
- (4) Identifying specific farmer opinions and suggestions on their personal future in Slovene agriculture.

Additionally, with respect to the farmer population, was the suspicion that "isolation" might affect farmer responses both in terms of villages being physically isolated as well as the in/out-of-village movement of farm families. Thus, the road became one of the critical underlying variables in final village selection. (That is, it is the road that facilitates truck/tractor, bus, and car traffic providing physical access to village residents, which in turn acts as a trigger for economic and social change.) (Tornquist 1968).³

Sample Population

Our analysis includes data from three populations: 654 farmers, 279 agronomists, and 443 legislators. Data was collected between February 15 and May 15, 1972.

The farmer population represents personal interview data from a random sampling of one-quarter to three-quarters of the households in 28 villages located in four major geographic regions of Slovenia: Primorska, Dolenska-Bela Krajina, Štajerska and Prekmurje.⁴ Of the 654 farmers, 112 represented returned questionnaires printed in two weekly farm newspapers: *Kmečki Glas* and *Vestnik*.

Personal interview data and data contained in the mailed questionnaires (representing virtually every corner of Slovenia) were very comparable. Therefore, we do not believe the sampling of villages based on the physical isolation criteria yielded biased farmer data.

The 279 agronomists and 443 county and republic legislators represents a 43 percent and 54 percent mailed questionnaire return rate on a full sampling of their

respective populations.

Measures

Program dimensions and target populations

The same two structured questions were used for all respondents. Eight program activities and ten audience groups were listed.

Improving the quality of village life

An open-ended question was used for all respondents. Twenty-seven different responses were grouped into eleven categories.

Future of Slovene Agriculture

Only farmers were asked to respond to a "yes-no" question followed with an open-ended "why" question to farmers responding negatively as to their future in agriculture. In addition, all farmers were asked for positive steps that should be taken to improve the agricultural situation for Slovene farmers.

Farmer profile characteristics

Individual social and economic characteristics were selected from adoption literature (Rogers and Beal 1958; Coughenour 1964; Rogers 1969) for Slovene farmer documentation. The thought here was to replicate the directions taken by adoption research in the United States in an attempt to identify farmer characteristics associated with agricultural change that might be of use to Slovene agronomists.

To control for intervening infrastructure variables which might affect farmer attitudes/behavior (in addition to the road) a village infrastructure index was developed. The final index is patterned after the Swedish rural-urban differentiation work of Swedner and that of Klemenčič (1965) in Slovenia.

III. FINDINGS AND DISCUSSION

Program Priorities

All groups (legislators, agronomists, farmers) were in high agreement that agricultural marketing and pro-

duction advice should be among the top program priorities of a new extension service. Additionally, we found all groups largely agreed that extension programs to assist rural youth should be a first priority program consideration. See Table 1.

Table 1. Extension Program Dimensions, First Priorities of Legislators, Agronomists and Farmers

Program	Percent Considering the Program A First Priority Item			
	Legislators		Agrons.	Farmers
	Republic	Country		
1. Agricultural Marketing	75%	82%	82%	91%
2. Agricultural Production	86	90	89	80
3. Farm Management	75	87	67	73
4. Rural Youth	65	69	63	72
5. Rural Leadership	43	39	32	64
6. Community Development	17	35	29	61
7. Home and Family	24	23	21	55
8. Natural Resource Conservation	31	31	31	40
Respondents	29	414	279	654

Farmers tended to see the extension service serving a much broader range of needs than did agronomists or legislators. For example, approximately 60 percent of the farmers felt the areas of community and home improvement coupled with more effective rural political leadership should be first priority programs of the new extension service. Less than one out of three agronomists and legislators felt the same way.

The fact that Slovene farmers perceive extension program assistance in broad areas of home, family, and community is further underscored in a regional comparison of program priority opinions. While the pattern of regional program priorities differs, particularly in the case of Primorska farmers, it does not obscure the fact that agricultural production is but one dimension of the Slovene farmer's life. See Table 2. By way of post-

script, 48 percent of the farmers interviewed considered *all* programs in the first priority category.

Table 2. Extension Service Program Dimensions, First Priorities of Slovene Farmers by Regions

Program	Percent Considering the Program Item a First Priority			
	Prek- murje	Štajer- ska	Dolenj- ska	Primor- ska
1. Agricultural Marketing	92%	85%	96%	79%
2. Agricultural Production	92	58	92	50
3. Farm Management	60	44	74	38
4. Rural Youth	78	78	63	63
5. Rural Leadership	70	54	68	33
6. Community Development	80	61	69	27
7. Home and Family	82	36	80	2
8. Natural Resource Conservation	65	39	28	6
Respondents*	178	138	115	52

*Data based on 483 individual interviews in the regions listed.

If indeed a single reason exists (e.g., a regional mentality) that explains the rather sizeable regional differences in program priorities we are not aware of it.

The Primorska data is a good point in question. How is one to interpret the relatively cool program responses of Primorska farmers? Are they apathetic, as some suggest? Or are they simply being "realistic" about *any* assistance they might receive from a new extension service?

In comparing individual farmer profile characteristics that appeared related to differences in program priorities, we found several "natural" patterns. For example, women (80 percent) were a bit more concerned than men (69 percent) over the first priority status of programs for rural youth. Similarly, those farmers living in relatively isolated villages and who were isolated themselves (relatively fewer outside village trips) were more concerned with community and home improvement programs.

Age and farm size provided the greatest areas of differentiation. Expectedly, younger farmers tended to show more relative concern than older farmers for extension programs geared to: home and family improvement, community development, and natural resource conservation.⁵ Interestingly, all farmer age groups were equally concerned that rural youth programs be given a high priority. Similarly, age did not appear to have an effect on the relative importance of the agricultural program inclusion.

With respect to farm size, we found larger farmers more concerned with farm management programs and programs dealing with improved rural leadership. Relatively speaking, they were slightly higher on programs to bring new production technology their way.

Audience Priorities

All groups agreed that the farmers should be the prime audience for any new extension-type assistance activity. Cooperatives (KZ's) and *Kombinats* (KIK's) constituted a clear "second" clientele group coupled with stores that handled agricultural items. Rural non-farm and city residents were considered equally low on the audience priority listing. See Table 3.

Table 3. Extension Service Audience, First Priorities of Legislators, Agronomists and Farmers

Audience To Be Served	Percent considering the Audience to be Served as a First Priority			
	Legislators		Agronomists	Farmers
	Republic	County		
1. Small farmers (0-3 ha.)	17%	14%	14%	43%
2. Middle-sized farmers (4-7 ha.)	79	70	65	74
3. Larger farmers (7 ha.)	82	78	86	73
4. Part-time farmers	31	9	10	31
5. Agric. co-ops (KZ)	62	67	54	40
6. Agric. Businesses/ Kombinats (KIK)	31	43	44	38

Table 3 (Continued)

Audience To Be Served	Percent Considering the Audience to be Served as a First Priority			
	Legislators	Republic	County	Agronomists Farmers
7. Non-agri. rural households	--	1	1	8
8. City residents	--	2	1	7
9. Stores, general	--	5	3	29
10. Stores, agricultural	48	49	44	58
Respondents	29	414	279	654

Legislators, agronomists and farmers singled out those farmers working four or more hectares of land as the prime audience within the farmer category. The data indicates, however, that while small farmers do not consider themselves top priority in terms of extension service assistance, they do feel they should not be excluded. See Table 4.

Table 4. First Priority Audience Considerations of Farmers by the Size of Farm

Audience	Size of Farm		
	Less than 3 ha.	4-7 ha.	Over 7 ha.
Small farmers (0-3 ha.)	58%	43%	45%
Middle-size farmers (4-7 ha.)	73	82	73
Larger farmers (over 7 ha.)	63	73	71

What is not clear is why part-time farmers are not considered just as much a part of the target audience as small farmers. After all, it can be argued that it is the part-time farmer who has a more direct access to the necessary capital for machinery and other production investments.

Another question the results raise is: to what extent are smaller holdings to be ignored in terms of service? Certainly the case can be made that it is often the older citizen who resides on a small holding. This being the situation, are the elderly farmers to be penalized for not being able to farm as much land as

they could when they were younger? Similarly, we find many young farmers trying to get established in farming by working small holdings, often while holding down a part-time job.

Comparing *farmer responses by region*, there is little doubt that farmers feel *they* should be the focus of any new agricultural program activity. We suspect that the relatively closer farmer relationship of KIK's and KZ's in the Prekmurje, particularly the KIK Pomurka, explains the comparatively large differences in opinion between Prekmurje and Primorska farmers when considering existing organizations as a prime client for assistance.

Strong farmer interest in farm stores (e.g., product availability and prices) especially in the Prekmurje and Štajerska was noted. This finding suggests that local KZ's and KIK's could expect to expand farm store turnover volume with minimal market investments.

Improving the Quality of Village Life

A major difference of opinion appears to exist between farmers and the legislator-agronomist group as to what specific actions would serve to improve the quality of Slovene village life. Legislators and agronomists seem to be saying: "An improved standard of village living will follow on the heels of increased production and actions to ease the cost-price squeeze." Legislators and agronomists appear to place their highest priority on actions directed at generating increased rural income (means) that at a later date can be used for specific village improvement projects.

From Tables 5A and 5B, it is fairly clear that farmers see the improving of village living standards in terms of projects that would improve road surfaces and bring stores and public services to the villages. Thus, farmers seem to be countering the legislators and agronomists with something like: "What you say may be true. Nevertheless, we would like to see more of the money that we are giving to the cities in taxes return back to the village to improve roads, bring water into our homes, and standardize rural electrical service."

It was our impression that the means versus ends differences of opinion among the two groups (farmers and legislators-agronomists) can be explained in part by

Table 5A. Summary of First Program Priorities to Improve Slovene Village Life, a Comparison of Legislator, Agronomist and Farmer Opinions

First Program Priority	Legislators		Agronomists	Farmers
	Republic	County		
Village services and buildings	14%	24%	11%	68%
Agricultural Problems	86	76	89	32

Table 5B. First Priority Suggestions to Improve Slovene Life, a Comparison of Legislator, Agronomist and Farmer Opinions

Program Priority	Legislators		Agronomists	Farmers
	Republic	County		
Roads and Transportation	--	10%	6%	41%
Water Service	9	10	6	12
Stores, Schools, Post Office, etc.	5	9	4	10
Farm and Home Credit	--	11	13	6
Land Consolidation	5	7	6	5
Social Insurance/pension	--	10	8	3
Agricultural Politics	9	11	15	6
Increasing Agricultural Production	38	15	19	5
Price Stabilization	29	18	22	4
Agricultural Mechanization	5	3	5	4
Other*	2	4	1	4

*Among the other priorities mentioned were: improving electric service, agricultural pick-up and delivery stations, industrial development, rural youth, rural tourism, extension service expansion, agricultural maximums, taxes, inheritance laws, and improved farmer associations.

differences in the professional orientation of the two groups.

The legislator-agronomist group, by profession, is planning oriented. Coupled with this, for the most part, is the fact that legislators and agronomists are not permanent village residents. They and their families do not have to cope daily with lower levels of public services than they enjoy in towns and cities. The net result is that the "natural" concern of legislators and agronomists is not so much in terms of social services as it is with agricultural production which yields revenue for future rural infrastructure investments.

In examining the physical access farm households have to various social-economic institutions (infrastructure) to get a reading on the types of service projects the new extension service might include in program priorities, we found that, (Table 6)

- (1) *Daily food items.* These were available in 11 of the 28 villages. In another 11 villages, farmers purchased food items in neighboring villages. Residents in the remaining 6 villages had to travel to larger cities to purchase daily food items (e.g., bread, sugar, etc.).
- (2) *Agricultural Sales or Pick-up Stations.* In 15 of the 28 villages farmers regularly used local or neighboring village facilities for the sale of farm commodities such as livestock, milk, fruit, and wine grapes. Farmers in the remaining 13 villages were oriented to markets in larger towns and regional centers.
- (3) *Agricultural Supplies.* Items such as seed, fertilizers, and feed concentrates were purchased locally in 7 of the villages. KZ and KIK stores in neighboring villages provided supplies for another 11 villages. In the remaining 10 villages farmers traveled to larger towns and regional centers for production supplies.
- (4) *Clothes/Textiles and Furniture.* In most instances farm families shopped in smaller towns (e.g., Sežana, Črnomelj, Slovenj Gradec, Lendava) or larger cities (e.g., Trieste,

Novo Mesto, Celje, Murska Sobota) for clothing, textiles and home furnishing needs.

Table 6. Average Distance Traveled by Slovene Farmers for Farm Related Purchases and Sales: Comparison by Region

Purpose of trip	Average Kilometers Traveled			
	Prek- murje	Štajer- ska	Dolenj- ska	Primor- ska
Household food items	1.1	3.2	3.7	3.7
Agricultural products	1.1	5.8	5.2	7.8
Agricultural supplies	3.3	5.2	4.2	8.0
Furniture	10.1	10.1	7.2	12.2
Clothing textiles	13.2	10.2	12.2	13.0

Important is the finding that daily food items were not available in 17 of the 28 villages. And that, on the average, Štajerska, Dolenjska and Primorska farm wives had to travel almost 7 kilometers (round trip) for food items. This situation certainly must work a hardship on older farmers and young mothers, particularly during bad weather.

The fact that most Slovene farm families generally will travel a few extra kilometers for wider selection and, perhaps, better prices for clothing and furniture is not surprising. What was interesting was the finding that due to a mixture of competitive prices, customer credit and, in some cases, a wider selection, well over half of the farmers voiced a preference to do their shopping in smaller town centers rather than travel to Ljubljana, Celje, or Maribor.

Quantifying the impact of farmer marketing and purchasing patterns on the efficiency of Slovene agricultural production is conjecture at best. We do not know, for example, if the marketing and purchasing patterns reflect the result of "farmer intelligence" concerning competitive prices (which is no doubt the case in many instances) or the reflection of traditional marketing patterns that may or may not make "economic sense."

It is our opinion, however, that the current marketing and purchasing patterns contain rather explicit situations wherein changes would benefit both the Slovene

farmer and consumer. For example:

- (1) Local fresh milk pick-up was unavailable in several instances with next villages far enough away to "cost" in terms of farmer time and milk quality.
- (2) Less than fully competitive local agricultural price policies exist (unwritten territorial agreements among KZ and KIK organizations), a condition that works to keep farmers "economically local."
- (3) Insufficient commodity and farm supply price information was available to farmers such as, for example, price differences between potentially competitive KZ's and KIK's, market commodity prices reports (daily or weekly) for different Slovene and Yugoslav cities, etc.
- (4) Limited farmer knowledge concerning variations in production contracts and agreements is available from KZ's and KIK's located in other regions of Slovenia or Yugoslavia (e.g., prices, benefits, conditions, etc.).
- (5) Limited programming and distribution capacities of KZ and KIK organizations with respect to local availability of reproductory items *when farmers need them* (e.g., seed, feed, fertilizer, machinery and spray materials).

Future in Slovene Agriculture

Approximately one-half of the 542 farmers we interviewed in 28 different villages indicated they felt agriculture held a future for them. The remaining half, however, were not too optimistic in this respect.

Table 7 shows that there was considerable variation among the regions on the future of farming question. For example, while 78 percent of the Prekmurje's farmers were optimistic, only 17 percent of those we interviewed in Primorska felt the same way. *Actually, 3 out of 4 regions included in the survey did not hold optimistic opinions when it came to the future of Slovene agriculture.*

Table 7. Selected Characteristics of Slovene Farmers by Region

Characteristics	Prek- murje	Štaj- erska	Dolenj- ska	Primor- ska
Future in Farming, "yes"	78%	38%	33%	17%
Home farm visit by agronomist	55	22	22	38
Farmer attended Demonstration	42	25	39	46
Off-farm job, farmer	24	32	37	50
Off-farm job, wife	9	17	21	31
Off-farm job, either	31	45	52	56
Trips/month out of village*	14*	10*	11*	20*

*Average number.

Keeping in mind that the findings vary among the regions, we found the following farmer profile characteristics related to situations where farmers tended to hold optimistic views towards the future of agriculture:

- (1) *Optimistic farmers tended to own farms with more arable land:*

<u>Farm Size: Arable Land</u>	<u>See a Future in Agriculture</u>
0-3 hectares	31%
4-6 hectares	64%
7 or more hectares	71%

- (2) *Optimistic farmers were visited by agronomists more frequently than those holding negative views. Similarly, they attended demonstrations and short courses/classes more frequently:*

<u>Home Visit by Agronomist</u>	<u>See a Future in Agriculture</u>
Yes	61%
No	39%

- (3) *Proportionately, fewer optimistic farmers held off-farm jobs:*

<u>Farmers Hold an Off-Farm Job</u>	<u>See a Future in Agriculture</u>
Yes	24%
No	76%

- (4) *Optimistic farmers tended to live in villages that had a higher percentage of agricultural households. We also found that the percentage of optimistic farmers tended to increase as the village became more isolated physically.*
- (5) *Villages that provided more community services, e.g., water, asphalt roads, bus service, schools, stores, etc., had a greater proportion of optimistic farmers than those with relatively few local village services available.*

As we noted, one-half of the farmers interviewed were rather negative on the future of agriculture. Three key reasons emerged.

- (1) Their particular farm was too small to be viable economically (24%),
- (2) They had no one left at home to assist with farming operations (24%),
- (3) Low agricultural prices (22%).

Other major reasons given were that their farm was located on poor land (13%) and high taxes (7%).

When asked what types of programs or actions farmers felt were needed to improve the "perspective" of Slovene agriculture, virtually all farmers had positive suggestions. *Farmers in all regions tended to agree on four or five first priority actions that would serve to improve the future of Slovene agriculture:*

- (1) Stabilize agriculture prices (31%)
- (2) Continued effort to mechanize production (18%)
- (3) Reduce taxes (17%)
- (4) Include private farmers in social insurance coverage at comparable levels with workers in the social sector (12%) [approved by referendum in November, 1972]

- (5) Expand private farmer access to farm and home credit (10%)

Perhaps just as important as the question concerning the future that agriculture holds for Slovene families were the disturbed feelings many farmers expressed relative to the declining self-sufficiency of Slovenia agriculturally, young children growing up in today's villages, and older people living out their lives on farms.

In talking with Slovene farmers, we found a deep concern expressed for the present trend that sees Slovenia becoming increasingly dependent on other regions/countries for her food supplies. Just what degree of self-sufficiency in food production Slovenia should strive to maintain is not clear, that is, in what commodities, and at what levels? The question of self-sufficiency in food production has the makings of a highly charged issue in the Slovene countryside. It is sufficient to say that Slovene farmers seem more concerned than their urban brothers about the fact that Slovene bread and butter comes to their plate with a passport.

With respect to children, many parents visibly were disturbed that a generation of children was growing up in economically dying households. They felt this situation was in the best interests neither of the children nor the country. Several felt that one place to start was with a more active effort to extend equal educational opportunities to rural youth (compared to urban children). High teacher turnover rates, the unavailability of teachers, school closings, limited vocational program offerings in rural areas, poorly equipped schools, and a lack of stipends for rural youth were specific issues parents mentioned as possible starting places to improve the rural educational situation.

Just what could be done to brighten the promise of a better tomorrow for older men and women was a subject more often "felt" than talked about in any length. When the issue *how* to improve the living conditions for older people was discussed, extending "complete" social insurance and pension benefits was the most frequently mentioned suggestion. Free public transportation, more extensive home visits by nursing staff, and assistance with household chores were other possibilities mentioned as ways to improve the future of aged Slovenes living out their lives on small parcels of land.

IV. SUMMARY

The agreement by legislators, agronomists and farmers that individual farmers should be the target audience of the new extension service is indicative of the broadly based concern in the well-being of rural Slovenia.

On the question concerning the issue of program priorities, there appears to be a considerable difference of opinion between farmers and agronomists/legislators regarding what should be the program priorities of a new extension service. Farmers see program priorities across the board: agriculture, home and family, community development, etc. Agronomists and legislators, however, tend to confine program priorities to agriculture: production, marketing, and management.

This apparent difference of opinion should be resolved *before* a new extension service is organized formally. We say "apparent difference" because we are convinced that both groups are really after the same goals of an improved quality of life for rural Slovenes. There is no doubt that agronomists and legislators would like to see KZ's and KIK's strengthened. On the other hand, it also makes common sense to realize that farmers live each day with more than just agriculture on their minds.

In this respect, perhaps the most significant study finding, in terms of extension program priorities, was the "rediscovery" that merely because a man or woman is a farmer does not mean that he or she eats, sleeps, and talks agriculture twenty-four hours a day, a useful reminder to social planners the world over.

Finally, the finding that conditions are reasonably positive in approximately one-half of Slovenia's 178,000 farm households must be weighted against what we felt was an unhealthy frustration in far too many households. We felt the key to raising "perspective" in the Slovene countryside rests, in large measure, with legislative considerations that will free-up resources that visibly will improve and equalize grassroots goods/services, thereby making the village a better place to live and raise children.

In retrospect, two dimensions of the Slovene Quality of Rural Life (QRL) problem bear continuing observation. The first deals with a possible redefinition of Yugoslav agrarian policy which has, to date, keyed on (1) the socialization of agricultural production and (2) increasing agricultural output. QRL, by definition, includes "agriculture" but is also considerably broader. If substantial monetary investments are allocated for infrastructure renewal-equity and environmental programs, this will represent the first substantial change in the rationalization/interpretation of agrarian policy seen in the Balkans in several centuries.

The second dimension deals with the "critical event" in resolving the QRL problem. The setting of program priorities, or, perhaps, the rationalization of a logic to affect the environment, seems paramount at the outset. However, in resolving a Slovene QRL solution the effective use of farm human resources may be more critical than finalizing a Slovene Green Plan. The rationale for this is the fact that Slovene farmers have proved to be excellent stewards of the countryside, for man and nature, through much of the 20th century. By nature, farmers are sensitive and acute systems oriented managers/proprietors of the environment. Thirty years of postwar institutional management training as members of KZ and KIK councils has further sharpened the quality of rural expertise residing in 178,000 Slovene farm households in 1976.

The crucial question, it appears, is the generation of a Slovene QRL strategy that enlists the management-systems experience of that nation's still considerable (but perishable) farmer population. This is a resource base, especially after thirty years of institutional management training, that few countries possess.

Southern Illinois University - Carbondale

NOTES

¹Research was carried out under the direction of Dr. Theodore Buila, Southern Illinois University, and Dip. Ing. Jože Spanring, Dr. Tatjana Štupica, and Dr. Rudolf Turk, of the Biotechnical Faculty (BF), the University of Ljubljana. Farmer interviewing (March-June

1972) was carried out by three BF diploma students (with the assistance of twelve colleagues enrolled in an Agricultural Extension Methods class at the BF): Alojz Senegačnik, Jože Dular, and Jože Matjašec.

²Current (1945-1976) extension-type program services are limited to agricultural production/management. These are provided to member-patrons by KZ, KIK, KIS, agronomists and technicians, and by staffs of the veterinary and forestry services.

One significant difference in program audiences of the post-1945 period—compared to that of 1919-1940—was the specific tailoring of activities for farm girls and farm wives. Slovenia had 15 full time homemaker schools/courses in operation in 1914, 21 in 1939, and none in 1976 (*Kmetijskogospodinske šole*). (Adamič 1972)

In a formal sense, the servicing of Slovene agriculture (rural households) dates back to the activities of the Carniolan Agricultural Society (*Kranjska kmetijska družba*) in 1767. This Society hired a Jesuit priest in 1771 to undertake the teaching of agricultural subjects to priests destined to serve in Slovene villages. (Degen 1967, Buila 1968). Activity carried on by officers and members of the Society resulted in the addition of agricultural course work to the curriculum of the Ljubljana lyceum in 1804, and to the emergence of the first full time agricultural schools in Ljubljana in 1850.

Prior to this period, Benedictine and Cistercian farmer-priests, coupled with societies of bee keepers, foresters, and silk growers, formed a crucible of informal Slovene technical assistance that extends back as far as the twelfth century.

³References in parentheses refer to works cited in the Bibliography.

The rationale for being sensitive to isolation is found in the work of Belloc (1925) who wrote in his book, *The Road*, "Not only is the Road one of the great human institutions . . . it is the Road which gives its framework to all economic development. It is the Road which is the channel of all trade, and what is more important, of all ideas." Likewise, anthropologists are quite explicit when it comes to the relative importance of social interaction, the by-product of the road, in the process of change. Ralph Beals (1952), discussing change in Mesoamerica, made a profound case for the impact of the road: "If I were to rate the acculturative

forces I have seen at work in various communities I think I would suggest that one road is worth about three schools and about fifty administrators."

⁴In the village selection process, the villages were grouped on the basis of their relative physical isolation and infrastructure levels. The village identification-selection process was as follows:

In each of the four regions (Primorska, Dolenjska, Štajerska, Prekmurje) the central city and principal secondary cities were noted on a map. Two circles were drawn around each, the first at 10 kilometers and the second at 15 kilometers. All villages located within the area between the two circles were listed. Villages were further categorized into three groups based on their relative physical isolation from the central or secondary city. The groups were as follows: Group I, villages serviced with five or more daily bus departures to the city; Group II, villages serviced with less than five daily bus departures to the city; Group III, villages located a 1/2 hour or more *walk* from the closest bus stop.

The villages included in the study were:

Prekmurje: Lipa, Tešanovci, Kuštanovci, Kapca, Hotiza, Nedeljica

Štajerska: Hrenova, Otema, Razgor, Bezovica, Razgorca, Turiška vas, Šmiklavž, Graška gora

Dolenjska: Mihovec, Vrhpeč, Dolenji Maharovec, Omota, Ručetna vas, Nova Lipa, Črešnjevec

Primorska: Kobjeglava, Šepulje, Velike Žablje

⁵The extremely low program priority given natural resources conservation by farmers, agronomists and legislators puzzles us (only one out of three considered it a first priority program). One answer, perhaps, is that by tradition the Forestry Services have been institutionally "responsible" for the broad area of natural resources (i.e., natural resources-environment is perceived as having an institutional home already). There was an encouraging note in our findings. Approximately 60 percent of the farmers under thirty years of age felt that natural resource conservation should be included as a first priority extension program activity.

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Appendix A. Scalogram of Village Infrastructure by Kinds of Service Institutions, Slovene Villages, 1972.

Village	Kind of Service Institutions ¹																							Number of kinds of SI's
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
Vodice	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	23
Tešanovci	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	18
Dramlje	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	17
Hotiza	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	17
Kapca	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	13
Šepulje	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	12
Šmiklavž	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	12
Lipa	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	12
Kobjeglava	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	11
Turiška vas	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	11
Jrhpeč	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	11
Dol. Maharovec	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	9
Nova Lipa	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	9
Črešnjevce	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	9
Nedeljica	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	8
Hrenova	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	7
Vel. Žablje	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	7
Trojica	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	7
Kušanovci	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	7
Razgor	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	5
Otemna	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	5
Vrhpeč	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	5
Ručetna vas	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	4
Razgorca	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	3
Bezovica	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	3
Mihovec	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2
Omota	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2
Graška gora	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2
Number of villages with this kind of SI	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	8	8	4	0	7	6	5	5	2	2	1	9	8	7	7	6	3	3	3	2	2	2	1	

¹Notes to Appendix*Kind of Service Institutions*

1. Electric Service
2. Road, any surface type
3. Road, all-weather surface
4. Bus Stop, within 1/2 hour walk
5. Organization or store, any type
6. Bus stop, 1-4 times per day
7. Church, 1 or more services per month
8. Farm sales pick-up station
9. Firehouse
10. General Store
11. Bus stop, 5 or more times per day
12. Farm Supply Store
13. Church, 1 or more services per week
14. Road, asphalt or cement
15. School, elementary or secondary
16. Cultural Hall
17. School, secondary
18. Post Office
19. County Offices, any
20. Inn
21. Child Day Care Center
22. Doctor
23. Industrial Firm