

IX / 4,5

INŠTITUT ZA GEOGRAFIJO
UNIVERZE V LJUBLJANI

E VIII / 4,6

Naslov: M. Jeršič, J. Lojk, L.
Olas, M. Vojvoda: Kmetijska
proizvodnja in izraba tal
vasi Sebeborci v Prekmurju

Leto izdelave: 1963

E III / 4,5

Institut za geografijo
univerze v Ljubljani

Matjaž Jeršič, Jože Lojk, Ludvik Olas, Metod Vojvoda

KMETIJSKA PROIZVODNJA IN IZRABA TAL V VASI SEBEBORCI V
PREKMURJU

UDK 911.3:33:332.3 (497.12 "Sebeborci")

inv. št. 27

Ljubljana, 1963



VAS SEBEBORCI

Sebeborci so agra no nase je ki leže na severozahodnem obrobju Panonske nižine, v Sloveniji. (severozahod Jugoslavije).

Vaško zemljišče obs ga v pretežni meri diluvialno teraso, ter del terciarnega gričevja, ki nosi naziv Goričko.

Naselje je 7 km oddaljeno od lokalnega središča Murske Sobote, ki je bilo do druge svet.vojne še izrazito upravno agrarno središče in se začelo hitreje industrializirati v zadnjem desetletju.

Sebeborci so povezani z Mursko Soboto le s cesto II. reda, od najbližje železniške postaje pa so oddaljen^h 3 km.

Domovi vasi so razporejeni na prehodu med terasno ravnico in gričevjem v vrsti ob cesti. Naselje v svoji rasti počasi napreduje. Leta 1869 je štelo 79 hiš, 1910 122 hiš, 1962 pa 130 hiš.

Tudi rast prebivalstva je bila v zadnjem stoletju počasna.

V za njih letih pa celo zaradi vse večjega izseljevanja število prebivalstva nazaduje. Leta 1869 je vas štela 440 ljudi, 1910 592, danes pa 544.

FIZIČNO GEOGRAFSKE OSNOVE

V mikrogeografskem pogledu zavzema ozemlje Sebeborca tri prirodno reliefne enote: ravno in sušnejšo diluvialno teraso, obrobje terciarnega gričevja, ter vlažnejši svet ob potokih, ki se iztekajo iz terciarnega Goriškega in zajedajo v teraso. Najobsežnejši in za kmetijsko izrabo najugodnejši del predstavlja dva kilometra



Slika 4. Pogled s terciarnih vzpetin na polja na diluvialni terasi.

Široka diluvialna terasa. Terasa je sestavljena iz proda in peska in prekrita s tenko ilovnato prstjo. Zemljišče terase je zaradi ugodnih prirodnih osnov v veliki meri izkoriščeno za njive.

Vlažni del zemljišča ob potokih predstavlja aluvialno ravnico prekrita z ilovnatimi nanosi. Ker je to slabše zemljišče ga izkoriščajo v pretežni meri za gozd in travnik.

Obrobje terciarnega gričevja severno od vasi sestavljajo terciarni peski, ki so prekriti s slabšo prstjo. Ta del je izkoriščen različno, v pretežni meri je prekrit z gozdom, deloma pa je izrabljen za njive in vinograde.

KLIMA

V Prekmurju, pokrajini h kateri prištevamo tudi vas Sebeborci, prevladujejo poteze kontinentalne klime z dokaj hladno zimo in sorazmerno toplim poletjem. Povprečna mesečna temperatura pade pod 0°C v decembru, januarju in februarju. Temperature spomladih hitro rastejo. Povprečna temperatura je večja od $9,5^{\circ}\text{C}$ od aprila do oktobra. Med julijem in avgustom koleba povprečna mesečna temperatura med 18 in 20°C . Znak tople in dolge jeseni pa je povprečna septembrska temperatura, ki znaša 15°C .

SREDNJA Mesečna in letna temperatura NURSKE SOBOTE ZA RAZDOBJE
1925 - 1956

mesec	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
temp.:	-2,6	-0,7	4,1	9,7	14,0	17,8	19,5	19,7	15,0	9,4	4,7	-0,2
sred.let.temp. za obdobje 1925-1956 znaša :	9.1											



Slika 2. Pogled s terciarnih vzpetin na polja na diluvialni terasi.

Klimatska ugodnost za kmetijsko gospodarstvo se kaže tudi v razporeditvi padavin. Srednja letna množina padavin ~~xx~~ znaša 766 mm in koleba od leta do leta med 700 in 900 mm. Padavin je več v topli polovici leta, v času vegetacijske periode ter manj v hladni polovici leta. Povprečna mesečna množina padavin presega od aprila do oktobra 50 mm, najbolj namočeni meseci pa so junij, julij, avgust in september, ko pade v vseh mesecih povprečno več kot 75 mm padavin. Izredna ugodnost v padavinskem režimu pa je velika namočena v poznih spomladanskih in zgodnjih poletnih mesecih, ko kulture potrebujejo več moče. Padavine v poletnih mesecih padejo v obliki nalivov in jih spremljajo nevihte. Zato je ob visokih temperaturah značilno hitro izhlapevanje kar prinaša v poletnem času nevarnost suše. Ugodna razporedba padavin in visoke temperature od zgodnje do pozne jeseni so osnova za dolgo vegetacijsko periodo, ki omogoča gojenje dveh kultur, glavne in strniščne, ter ugodne osnove za sadjarstvo in vinogradništvo.

SOCIALNO POSEBNE RAZMERE

Kmetijska zemlja v Sebeborcih je v posesti privatnikov. V rokah splošnega ljudskega premoženja je le malo zemlje.

Socialno posebne razmere so raznolike. Od skupnega števila kmetijskih obratov jih ima 15% do 2 ha zemlje, 10% od 2-3 ha, 25% od 3 - 5 ha, 5 - 8 ha in nad 8 ha. 90% zemlje je v rokah kmetijskih obratov z nad 2 ha, velik del - 50% zemlje, pa je v rokah kmetijskih obratov, ki imajo več kot 8 ha zemlje.

Vas že od nekdaj ni mogla preživljati vsega prebivalstva. Del prebivalstva se je že pred II. svet. vojno za trajno izselil iz vasi.



Slika 4. Vaška ulica s kmečkimi domovi. Novejši del vasi.

Del prebivalstva, zlasti gospodarji malih kmetij, pa so že v letih pred I.svet.vojno, ter med obema vojnama ustvarili v obliki sezonske zaposlitve izven vasi dodaten vir dohodkov. Pred I.svet.vojno so se sezonsko zaposlevali v kmetijstvu na Madžarskem; med obema vojnama v Franciji, Nemčiji ter v Vojvodini (Jugoslaviji). Po II.svet.vojni pa na velikih kmetijskih obratih v Sloveniji, ter v gradbeništvu po mestih. V zadnjih letih sezonsko zaposljevanje močno nazaduje, ker se s pridobitvij zaposlitve v drugih krajih Slovenije in Murski Soboti prebivalstvo za trajno izseli v kraj zaposlitve, deloma pa dnevno potuje na delo v Mursko Soboto ali bližnje Puconce. Posledica tega je, na eni strani nazadovanje števila prebivalstva, na drugi strani pa manjšanje deleža kmečkega prebivalstva. Od skupnega števila 544 prebivalcev živi danes od kmetijstva 72% ljudi, ostali del pa od zaposlitve v Murski Soboti in Puconcih.

S procesom prehajanja kmečkega prebivalstva v druge poklice moremo slediti oblikovanju štirih tipov kmetijskih gospodinstev. Prvi tip čistih kmetijskih obratov, pri katerih so še vsi družinski člani zaposleni na kmetiji.

Drugi tip polkmečkih obratov, pri katerih del družinskih članov že dela izven kmetijskega obrata, v nekmetijskih gospodarskih panogah.

Tretji tip kmetijskih obratov, pri katerih so razen gospodinje že vsi člani zaposleni izven kmetijstva.

Četrty tip delavskega gospodinjstva z vrhom in hišo.



Slika 3. Vaška ulica s kmečkimi domovi. Starejši del vasi.

Čistih kmetijskih obratov je 53% in imajo v rokah 2/3 zemlje.

Polkmeških obratov je 1/4 in imajo 1/4 zemlje, delavskih družin pa je 20% in imajo v rokah 9% zemlje.

Še bolj je značilno razmerje med velikostjo in poklicno strukturo gospodinjstev kmetijskih obratov. V posestni skupini od 0 do 0,5 ha zemlje so vsa gospodinjstva delavska, v posestni skupini od 0,5 do 3 ha je 1/4 čistih kmeških gospodinjstev, 1/4 polkmeških ter 1/2 nekmeških, kjer so doma le gospodinje. Pri gospodinjstvih z več kot 3 ha zemlje pa je kmeških in polkmeških 90% gospodinjstev.

Značilno je, da je pri večjih kmetijskih obratih z več kot 8 ha zemlje še 1/4 polkmeških obratov, kar kaže, da se je proces razkroja kmetijskih gospodinjstev v zadnjem času uveljavil tudi v Sebeborcih

IZRABA TAL

Celotno zemljišče Sebeborec meri 675 ha 96 a. Od tega zavzemajo obdelovalne površine 3/4. Največ je njivskih površin, ki obsegajo 335 ha ali 49% celotne površine, travnikov je 131 ha ali 19.6%, sadovnjaka 30 ha ali 4.4%, vñnograða 12 ha ali 2.1%. Gozd zavzema 154 ha ali 23%, nerodovitni svet pa le neznatne površine.

Razmerje med zemljiškimi kategorijami po posestnih grupah kaže, da je pri vseh posestnih grupah na prvem mestu njiva. Razmerje travnikov in gozdov pa je pri posestnikih vseh velikostnih grup različno, nekateri imajo več gozda, drugi več travnika.

Za obseg zemljiških kategorij smo se naslonili na dva vira podatkov. Na katastr in na statistične podatke kmetijskega popisa iz leta 1960. Podatki obeh virov se ne ujemajo. Po statističnem popisu iz leta 1960 je v primerjavi s podatki katastra 10 ha manj njiv, 7 ha več

travnikov, 2 ha manj vinogradov in 1.5 ha manj sadovnjakov.

Razlike so nastale, na eni strani zaradi različnih popisovalnih kriterijev, na drugi strani pa so tudi odraz procesa spreminjanja slabših njiv, ter sadovnjakov in vinogradov v travnike.

NAČINI IZRABE TAL

Kljub spreminjanju poklicne strukture ~~po~~ kmetijskih obratov, ki so v zadnjih letih vse bolj uveljavlja na vasi ne moremo zažediti pomembnejših sprememb v načinu obdelave zemlje. Način obdelave je pri vseh socialno posestnih in poklicnih kategorijah gospodinjstev močno podoben. Z zastalim načinom obdelave zemlje, ki je bil nedavno še v prevlađi se že mašajo tudi moderne oblike. Obdelavo z živino le počasi nadomešča obdelava s stroji.

Ker je živinoreja dobro razvita gnoje še povsod s hlevskim gnojem, kateremu pa tudi že dodajajo umetni. Krompir in koruzo gnoje s hlevskim gnojem, rž in ~~pa~~ pšenico mešano s hlevskim in umetnim, travnike pa le ponekod s hlevskim.

Kulture kolobarijo na tri načine. V triletnem kolobarju in v dveh variantah štiriletnega kolobarja.

I. triletni kolobar:

1. pšenica
2. rž - repa ali ajda (strniščna posevka)
3. koruza ali krompir

II. štiriletni kolobar:

1. pšenica
2. rž - repa ali ajda
3. detelja

4. koruza ali krompir

III. štiriletni kolobar:

1. pšenica
2. rž - repa (strniščni posevek)
3. krompir ali koruza
4. detelja

Mala posest ter razmetanost parcel po vaškem zemljišču omogoča le skromne oblike mehanizacije, predvsem tiste oblike, ki so vezane na vprežno živino.

Povprečno odpade na kmetijski obrat 21 parcel, od tega njivskih in travniških po 6, gozdnih 4, vinogradniških 1.1 in parcel sadovnjaka 1.4.

Povprečna velikost parcele znaša 26 a, od tega njivske 41 a, travniške 21 a, vinogradniške 0.9 a, parcele sadovnjaka 0.2 a in gozdne 31 a.

Zemlja je vsa obdelana. Kmetje si pri delu med seboj pomagajo. Večji kmetje pomagajo manjšim z vprežno živino in stroji, manjši pa pomagajo večjim z delom. Ob kmetijskih delih, ki zahtevajo hkrati več delovne sile, predvsem ob mlačvi in žetvi, pa prihajajo na pomoč poleg sosedov tudi že odseljeni sorodniki iz bližnjih krajev.

Za obdelavo je v vasi na razpolago: 119 plugov, 176 bran, 94 okopavnikov, 34 sejalnikov, 2 kosilnici, 138 slamoreznic, 15 prebiralnikov, 58 stiskalnic za grozdje, 9 kotlov za žganje in 92 drugih strojev.



Slika 6. Star tip kmečke hiše, -"stegnjeni dom%", kmečkega gospodinjstva s 5 hektari zemlje.

Poleg tega sta v vasi 2 mlatilnici, ena je v lasti privatnika, ena v posesti zadruga.

USMERJENOST IZRABE TAL

Za panonsko obrobje, na katerem leže Sebeborci, je značilna usmerjenost v pridelavo žitaric. Še do II. svet. vojne je bilo v Prekmurju 90% z žiti posejanih njivskih površin. Delež z žiti posejanih površin pa je z preusmerjanjem v živinorejo iz leta v leto manjši in je znašal l. 1962 v Sebeborcih še 62%. Hitro preusmerjanje moremo pripisati na eni strani zgraditvi mlekarne v Murski Soboti, ki vsak dan redno odkupuje mleko, ter ugodni možnosti prodaje mlade živine v mesno predelovalni obrat v Murski Soboti ali pa za izvoz v inozemstvo. S povečanjem vloge živinoreje ter manjšanjem z žitom posejanih površin pa v poljedelstvu iz leta v leto pridobiva na pomenu pridelava krmilnih rastlin.

IZRABA NJIVSKIH POVRŠIN

Na njivah prevladuje 5 kultur. Pšenica in rž od žitaric, krompir in koruza od okopavin in črna detelja od krmilnih rastlin. Pšenica in rž zavzemata skupno 50%, koruza in krompir 30%, ostalih 20% pa odpade na vrsto drugih kultur. Značilna je setev kvalitetne trave za seme, katera je namenjena za mestne travne nasade (parke in ki daje na majhnih površinah razmeroma velik dohodek.

Pšenica, rž, koruza in krompir imajo v primerjavi z republiškim hektarskim dohosom razmeroma visoke donose. Hektarski donos pšenice znaša 20.5 q na ha in odgovarj povprečnemu donosu SR Slovenije, ter je višji od jugoslovanskega za 3q. Povprečni donos

koruze znaša 33.5 q/ha in je višji od hektarskega donosa Slovenije (28.7 q/ha) in Jugoslavije (23.9 q/ha). Hektarski donos krmilnih rastlin, zlasti lucerne, je sorazmerno nizek (58 q/ha) in je nižji od hektarskega donosa Slovenije (61 q/ha).

Razmeroma majhne površine obdelovalne zemlje odpašejo na vrtove, ki so običajno razvrščeni okoli ali v bližini hiš. Na vrtovih pridelujejo razne vrste zelenjave, papriko, paradižnik, solato ter nekatere druge vrtnine, ki v glavnem služijo za domače potrebe.

STALNI NASADI

V Sebeborcih je poleg ostalih kmetijskih gospodarskih panog razvito tudi sadjarstvo in vinogradništvo. Obe panogi sta imeli v različnih razdobjih gospodarskega razvoja spremenljivo vlogo. Klimatski pogoji so za obe panogi ugodni, zlasti prija dolga in topla jesen. Še pred desetletji je bilo vinogradništvo pomembnejše od sadjarstva. Na pobočju terciarnega gričevja je imel vsak kmet vsaj po eno večjo ali manjšo parcelo vinograda. V povojnih letih je vinogradništvo v nazadovanju, saj je za stalno obnavljanje vinograda potrebno precej finančnih sredstev, dosti truda in delovne sile katere v zadnjem času z odseljevanjem vse bolj primanjkuje. V vinogradih prevladuje šarnica (samorodnica), nasadi pa so večinoma stari. Obseg vinogradov se zelo hitro krči. Večino grozdja predelajo v slabše kvalitetno vino in ga uporabljajo le za domače potrebe.

Sadovnjaki so razporejeni ob hišah in na pobočju terciarnega gričevja med vinogradi. Med vrstami je številčno najmočješe sadno

drevje jablane in slive, XI Vsaka vrsta šteje po 2000 dreves. Ostale vrste hruške, češnje, višnje, kanelice, breskve in orehi pa štejejo skupno okoli 800 dreves. Sadjarstvo z nazadovanjem vinogradništva vse bolj pridobiva na pomenu, saj je od skupnega števila sadnih dreves skoraj ena tretjina mladih. Sadovnjaki so negovani. Sadje služi prehrani domačega prebivalstva, del ga predelajo v žganje, večje količine pa ga prodajo.

STALNE TRAVNE POVRŠINE

Travni svet v Sebeborcih nima posebno velikega pomena in zavzema le relativno slabša in manj ugodna vaška zemljišča. Oskrba goveje živine ni v veliki meri vezana na seno, temveč bolj na mešanico slame in detelje. Po kvaliteti in značaju ločimo tri področja travnikov. Prvi pas travnikov je na slabših vlažnih tleh ob potokih, ki niso meliorirani in so porasli z redkim jelševjem in akacijo. Drugi pas se vleče ob robu gozda in ga skoraj povsod prerašča grmičevje. Trtji pas travnika se vleče ob hišah pod sadovnjaki. Travnike gnoje le občasno. Kose jih dvakrat letno. V jeseni pa tiste, ki so bližje vasi, tudi delno popasejo.

GOZD

Gozda je na ozemlju vasi Sebeborec malo in še ta je razbit na tri komplekse. Prvi večji sklenjeni pas gozda se razprostira na jugu vaškega zemljišča, drugi na vzhodu na terciarnem gričevju in tretji, ki je razbit v posamezne manjše komplekse, na severnem mejnem pasu.

Na vlažnih tleh ob potoku prevleduje gaber, jelša in akacija, na terciarnem svetu pa se mešajo bor, bukev in hrast.



Slika 5. Star tip kmečke hiše. dom je v ključu. Hiša je zgrajena iz lesain ilòvice. V novejšem času ta tip hiše zamenjuje modernejša zidana hiša.

Prevlada ene vrste drevja na drugo se od parcele do parcele menja. Gozd je v privatnih rokah in razdeljen na majhne parcele. Kmetje so ga vse do zadnjih let sekali nenačrtno za svoje potrebe, za kurjavo in gradnjo hiš. Zato le v redkih primerih dočakajo drevesa zrelo starost. Skoraj povsod prevladuje nezrel gozd, star od 20 do 30 let. Mlajšega, do 10 let starega gozda, je največ ob potoku. Drevesa zrele starosti pa se nahajajo le sporadično. Ker se je v zadnjih letih vloga lesa pri gradnji zmanjšala in so za kurjavo pričeli uporabljati premog, se uveljavlja racionalnejše gospodarjenje. Obseg gozda je v zadnjih 50 letih nekoliko napredoval, saj so kmetje morali del njivskih površin na terciarnem svetu zaradi napredujoče erozije pogozditi.

NASELJE

Naselje Sebeborci je tipična obulična vas z razporejenimi hišami ob vaških poteh.

Po svojem zunanjem videzu je vas še povsem kmečka. V vasi je še precej hiš zgrajenih iz lesa in ilovice ter prekritih s slamo. Pred I. svet. vojno se je precej hiš moderniziralo v stilu panonske zidane hiše. Po II. svet. vojni pa je zrastle tudi nekaj delavskih urbaniziranih hiš.

Največ domov je "v ključu", prvi del je hiša, drugi hlev, tretji gospodarsko poslopje. Pri "stegnjenem domu" pa se vrstijo funkcije v istem redu.



Slika 7. Novejši tip kmečke hiše, ki je bila zgrajena po 2. svetovni vojni. Kmetija poseduje nad 10 hektarov zemlje.

RASTLINSKA PRODUKCIJA

Intenzivnost obdelave se kaže v sorazmerno visoki rastlinski produkciji na 1 ha. Povprečna vrednost rastlinske produkcije na 1 ha kmetijskih površin znaša 20.9 žitnih enot, na 1 ha njiv znaša 23.9 žitnih enot, na 1 ha travnika 16 žitnih enot, na 1 ha pašnika 5 žitnih enot, in na 1 ha sadovnjaka 14 žitnih enot.

Celotna ^{absolutna} rastlinska produkcija vasi znaša 10 585 žitnih enot.

Produkcija prehrabnih rastlin zavzema več kot 50%. Od prehrabnih rastlin sta na prvem mestu pšenica in krompir. Produkcija pšenice znaša 1 754 žitnih enot ali 16.8% rastlinske produkcije. Krompir 1 777 žitnih enot ali 16.9%, produkcija rži in soržice pa znaša 1 397 žitnih enot ali 12% rastlinske produkcije.

Produkcija krmilnih rastlin znaša 4 629 žitnih enot ali 43.7% rastlinske produkcije. Pri krmilnih rastlinah je najpomembnejša kuruza s 1 037 žitnimi enotami ali 10% rastlinske produkcije.

Pri kuruzi moramo poudariti, da služi v teh krajih ~~xxx~~ tudi za prehrano prebivalstva. Od rastlin, ki služijo izključno krmiljenju živine je na prvem mestu detelja z 836 žitnimi enotami ali 8% celotne rastlinske produkcije. Rastlinska produkcija na travniku znaša 2 211 žitnih enot ali 21%.

Industrijske rastline so v fazi širjenja in je z njimi posejane še sorazmerno malo površin. Skupna produkcija industrijskih rastlin znaša 163 žitnih enot ali 1.6%.

Sadovnjak in vinograd sta v pokrajini sicer fizionomsko močno poudarjena, vendar je produkcija v primeri z drugimi rastlinami

sorazmerno nizka in znaša skupno 580 žitnih enot ali 5.5%.
 Od tega znaša produkcija sadja 273 in grozdja 308 žitnih enot.

ŽIVINOREJA

Vse do zadnjih let pred II.svet.vojno je živinoreja po svojem pomenu zaostajala za poljedelstvom. Tedaj je bila vezana na pridobivanje krme na slabo kvalitetnih travnikih in na krmo s slamo. Po II.svet.vojni pa je živinoreja zlasti z zgraditvijo tovarne mlečnega prahu in z razširitvijo mesne predelovalne industrije v Murski Soboti, kakor tudi z načrtnejšim odkupovanjem živine pridobila na pomenu. Na njivskih površinah se vse bolj veča obseg s krmilnimi rastlinami posejanih površin. ~~Živinoreja se modernizira predvsem z izbiro pasme in racionalnejšim življenjem. Kmetje so se orientirali v prvi vrsti na rejo mladega goveda za zakol, mlečne živine in prašičev. Število živine izražene z GNŽ (glavami normalne živine) znaša skupno 584. Od tega znaša število goveda 396 GNŽ ali 67.7%. Pri svinjah znaša 116 GNŽ ali 19.9%, pri konjih 44 GNŽ ali 7.5% in pri perutnini 27 GNŽ ali 4.6%. Gospodarski pomen perutnine izražen z GNŽ ni dovolj povdaren, saj predstavlja prodaja jajc, podobno kot mleko, redni in pomemben dohodek.~~

ŽIVINOREJSKA PRODUKCIJA

Za pregled živinorejske produkcije razpolagamo s podatki za produkcijo mleka, za produkcijo govedi in svinj ki so bile prodane za zakol in/ali pleme in produkcijo jajc. Ne razpolagamo s podatki za produkcijo mesa, ki je bilo porabljeno v vasi za domačeo

prehrano., ker so te količine sorazmerno velike saj v vsakem gospodinjstvu zakoljejo letno vsaj enega do dva prašiča za domačo porabo, ne dobimo realnegapogleda v celotno živinorejsko produkcijo. Po razpoložljivih podatkih je po vrednosti živinorejske produkcije na prvem mestu mleko, ki zavzema 3 082 žitnih enot ali 57.3% vse živinorejske produkcije. Vrednost letne produkcije govedi in svinj, ki so bile prodane za zakol znaša 1.536 žitnih enot ali 29%. Vrednost za pleme prodanih svinj in telet znaša 313 žitnih enot ali 5.8% živinorejske produkcije. Produkcija jajc pa znaša 407 žitnih enot ali 7.6%.

CELOTNA PRODUKCIJA

Skupna produkcija vasi znaša 15 966 žitnih enot. Od tega odpade na rastlinsko produkcijo le 585 žitnih enot ali 66.3% , na živinorejsko produkcijo pa 5 381 žitnih enot ali 33.7%. Dejanski delež živinorejske produkcije je večji, ker kot že omenjeno ni upoštevana mesna produkcija, ki se je porabila za domače potrebe v vasi. Zato lahko smatramo, da se realna vrednost živinorejske proizvodnje približuje rastlinski.

Celotna produkcija 15 966 žitnih enot na 505 ha kmetijske površine odn. 31 žitnih enot na 1 ha kmetijske površine je sorazmerno ugodne.

Produkcija prehrabnih rastlin 36.3% celotne produkcije, produkcija krmilnih rastlin z 29.% celotne produkcije ter živinorejska produkcija s 33 % kažejo, da je produkcija usmerjena v živinorejo in poljedelstvo.

E III / 4, 5a

Matjaž Jeršič, Jože Lojk, Ludvik Olas, Metod Vojvoda
Institute of Geography , University of Ljubljana

LAND UTILIZATION IN SEEBORCI
(SLOVENIA , YUGOSLAVIJA)

Ljubljana

Sereborci is an agrarian settlement lying on the north-western outskirts of *Pannonia* in Slovenia (in the North-West of Yugoslavia). The village territory consists mainly of the diluvial terrace, and of a part of the tertiary hills called Goričko. The settlement is 7 kilometres away from the local centre of Murska Sobota, which was down to the World War II an expressly administrative agrarian centre and which ^{has} been getting industrialized only in the last decade. The village is connected with Murska Sobota only by a road of II rank; the nearest railway station is 3 kilometres away. The homes of the village are distributed between the terrace plain and the hills in a line along the road. The number of houses is growing slowly: in 1869 it had 79 houses, in 1910 122 houses, in 1962 130 houses. The growth of the population in the present century has also been slow. In recent years owing to the increasing ^eimmigration, it has even retrograded. In 1869 the village had 440 inhabitants, in 1910 592, and to-day it has 544 inhabitants.

Physical-geographical basis

In microgeographic respect, the territory of Sereborci occupies three natural relief units: the plain and somewhat dry diluvial terrace, the fringe of the tertiary hills, and the more moist land, where the brooks from the tertiary hills force their way into the terrace. The largest in size and for farming utilization most suitable part is represented by the two kilometres broad diluvial terrace. The terrace is composed of gravel and sand and it is overlaid by thin loam soil. The territory of the terrace is ^{because of} ~~due to~~ the favourable natural conditions mainly utilized for fields.

The moist part of the land, where the brooks flow, is represented



Picture 1. A view from the tertiary uplands on the field surfaces
on the diluvial terrace.



Picture No. 2. A view from the tertiary uplands on the field surfaces on the diluvial terrace.

by the alluvial plain which ^{is} ~~are~~ covered with deposits of loam. As this is a worse kind of land, it is mainly used for meadows and as forest.

The fringe of the tertiar hills which lies ~~in the west~~ westwards from the village is composed of tertiar sands covered with a worse kind of soil. That part is variously utilized; it is mainly covered with forest, but also used for fields and vineyards.

The climate

In Prekmurje, a province to which the village of Sereborci belongs, the features of continental climate, with rather cool winters and proportionately warm summers, predominate. The average monthly temperature is below zero in December, January, and February. From April till October the average monthly temperature is above 9,5°C. The average monthly temperature between July and August varies from 18°C to 20°C. A sign of the long and warm autumn is the average September temperature of 15°C

The average monthly and yearly temperature in Murska Sobota for the period 1925-1956

Month:	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
Degrees in C:	-2,6	-0,7	4,1	9,7	14,0	17,8	19,5	19,7	15,0	9,4	4,7	-0,2
The medium yearly temperature for 1925-1956 period: 9,1												

~~Climate~~ The distribution of precipitation is another climatic feature favouring the farming economy. The medium yearly quantity of precipitation is 766 millimetres, with the yearly variation ^{between and} ~~from~~ 700 ~~to~~ 900 millimetres. More of the precipitation falls in the warm half of the year - in the vegetation period, and less in the cold half of the year. From April to October the monthly average of precipitation goes beyond 50 millimetres; the

THE SIZE IN HECTARES OF LAND CATEGORIES ACCORDING TO THE SOCIAL AND OWNERSHIP GROUPS

Social and ownership cat.		FIELD	MEADOW	ORCHARD	VINEYARD	GARDEN	PASTURE	FOREST	WASTE LAND	BUILT-UP AREA	TOTAL
0 - 0.5	ha	0.73	0.13	0.20	0.11	-	-	0.05	-	0.21	1.43
	%	51.2	9.3	13.7	7.5	-	-	3.7	-	14.6	100%
0.5 - 2	ha	7.52	3.13	1.13	0.40	-	-	3.32	-	0.52	16.02
	%	46.9	19.5	7.0	2.5	-	-	20.8	-	3.3	100%
2 - 3	ha	21.85	5.89	2.16	0.79	0.02	-	5.66	-	0.87	37.24
	%	58.7	15.8	5.8	2.10	0.05	-	15.2	-	2.35	100%
3 - 5	ha	63.36	21.08	5.93	2.50	0.23	0.07	19.35	0.07	1.71	114.32
	%	55.4	18.5	5.2	2.2	0.15	0.05	16.9	0.05	1.55	100%
5 - 8	ha	95.11	37.77	7.91	4.17	0.12	0.41	39.03	0.16	2.13	186.81
	%	50.9	20.2	4.2	2.3	0.06	0.24	20.9	0.08	1.12	100%
8 - 10	ha	37.46	14.38	3.71	1.60	0.01	0.03	28.62	0.03	0.77	86.61
	%	43.2	16.6	4.3	1.7	0.02	0.04	33.2	0.04	0.9	100%
above 10	ha	109.50	49.32	9.20	4.75	0.02	0.72	58.10	0.12	1.76	233.49
	%	46.9	21.3	3.9	2.1	0.00	0.30	24.9	0.05	0.55	100%
Total	ha	335.53	131.72	30.25	14.32	0.40	1.23	154.15	0.38	7.97	675.95
	%	49.6	19.6	4.4	2.1	0.06	0.2	22.8	0.05	1.19	100%

THE NUMBER OF FARMING WORKS ACCORDING TO THE SOCIAL AND THE OWNERSHIP CATEGORIES

Social and owner ship cat.	0 - 0.5	0.5 - 2	2 - 3	3 - 5	5 - 8	8 - 10	above 10	Total
----------------------------------	---------	---------	-------	-------	-------	--------	----------	-------

SEBEBORCI

number	7	12	14	29	31	10	20	123
%	5.6	9.7	11.4	23.8	25.2	8.1	16.2	100%

months with most rain - on the average more than 75 millimetres per month - are June, July, August, and September. A most favourable circumstance in the regime of precipitation is the high amount of rain in the late spring months and in the early summer, when the crops need a great deal of moist. In summer, precipitation comes down in showers, mostly in thunderstorms. When the temperature is high, we get the typically quick evaporation, which may cause dryness.

Medium monthly and yearly amount of precipitation in
Murska Sobota for the period 1948 - 1956

Month:	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
millimetres	47,7	41,5	25,0	54,1	79,2	102,0	74,5	75,5	99,7	66,2	65,6	44,1
Medium yearly amount:	766 millimetres											

Favourable distribution of precipitation and high temperatures during the whole of autumn form a basis for a long vegetation period, which makes it possible to grow ^wto crops: a main one and stubble field one, as well as favourable conditions for the growing of orchard trees and vine.

The social and ~~the~~ ownership conditions.

The agricultural land of Sereborci is privately owned. Only a small part of the land is state-owned. The social and ownership conditions vary a great deal. Of the total number of farming estates, 15% have up to 2 hectares of land, 10% from 2 to 3 hectares, 25% from 3 to 5 hectares, 25% again from 5 to 8 hectares and another 25% more than 8 hectares of land. (Table No. 2). 90% of land is in the hands of landowners with more than 2 hectares; a large part - 50% - of land is included in the estates that have more than 8 hectares (Table No. 1).

Already in previous times, the village was not able to maintain the whole of its population. Part of it ^eimmigrated as early as before World War II for good. Another part of population, particularly smaller farmers, found already before World War I and between the Wars a souce ^hof additional income in the seasonal work outside the village. Before World War I they used to take seasonal work on the farms in Hungary; and between the Wars in France, Germany, and in Vojvodina (Yugoslavia). ~~xxx~~ Since World War II they find such work in the larger farming works in Slovenia, or in the building industry in towns. In recent years the seasonal employments is on the decrease because by finding employment in ~~ix~~ other parts of Slovenia or in Murska Sobota the population migrates for good to the place of employment, or the workers travel daily to work in Murska Sobota or in the nearby Panonce. One consequence of that is the falling of the number of inhabitants, the other one the drecreasing number of the farming population. Of the total 544 inhabitants, 72% live by the farming work and the rest ~~Byx~~ by the jobs in Murska Sobota or Panonce.

The process of farming population passing into ~~xxxxx~~ non-agrarian occupations is developing four types of farming works. The first type represents pure farming works, with all members of the family working permanently on~~t~~ the farm. The second type are the half-farming works, where some members of the family work as well outside the farming works, in ~~an~~non-agrarian branches. The third type of the farming works are those, where all members, except housewife, work outside the farm. The fourth type are worker's households with simply a house and a garden.

There is 53% of pure farming works and they possess two thirds of

THE VILLAGE OF SEBEBORCI

TABEE No 3

THE NUMBER OF HOUSEHOLDS ACCORDING TO THE ECONOMIC ACTIVITY AND ACCORDING TO THE SOCIAL AND THE OWNERSHIP CATEGORIES

The social and the ownership categories	A		B		C		D		TOTAL	
	number	%	number	%	number	%	number	%	number	%
0 - 0.5	1	14.3	-	-	-	-	6	85.7	7	100
0.5 - 2	3	25	3	25.0	4	33.3	2	16.7	12	100
2 - 3	4	28.6	3	21.4	7	50.0	-	-	14	100
3 - 5	15	51.7	12	41.4	2	6.9	-	-	29	100
5 - 8	19	61.3	9	29.0	3	9.7	-	-	31	100
8 - 10	8	80.0	1	10.0	1	10.0	-	-	10	100
above 10	15	75.0	5	25.0	-	-	-	-	20	100
Total	65	52.8	33	26.8	17	13.9	8	6.5	123	100

A = pure farming households

B = mixed half-farming households with preponderance of active members occupied with farming

C = mixed half-farming households with preponderance of active members not occupied with farming

D = non-farming households

THE AVERAGE SIZE OF STRIPS PER 1 LANDOWNER ACCORDING TO THE SOCIAL AND THE OWNERSHIP CATEGORIES

The social and the ownership categories	FIELDS ha,a	MEADOWS ha,a	ORCHARD ha,a	VINEYARD ha,a	GARDEN ha,a	PASTURE ha,a	FOREST ha,a	WASTE LAND BUILT-UP ha,a	T O T A L ha,a
0 - 0.5	0.12	0.7	0.10	0.11	-	-	0.5	0.2	0.7
0.5 - 2	0.27	0.12	0.14	0.7	-	-	0.17	0.2	0.15
2 - 3	0.34	0.12	0.10	0.7	0.53	-	0.20	0.3	0.18
3 - 5	0.34	0.16	0.16	0.6	0.2	0.7	0.18	0.3	0.20
5 - 8	0.39	0.20	0.16	0.10	0.3	0.20	0.32	0.3	0.26
8 - 10	0.50	0.24	0.22	0.9	0.1	0.3	0.37	0.4	0.32
above 10	0.53	0.30	0.22	0.13	0.2	0.10	0.39	0.4	0.35
T o t a l	0.41	0.21	0.17	0.9	0.2	0.11	0.31	0.3	0.26

the land. The second type occupies one fourth and the half-farming works possess one fourth of the land. The remaining 20% comes to the non-farming families which have in their hands 9% of land. (Table No 3, No 4).

Even more characteristic ~~is~~ is the proportion between the size and the professional structure of the households of the farming works. In the group of landowners with 0,0 - 0,5 hectares of land all the households are of the working-class type, in the group of landowners with 0,5 to 3 hectares of land there is one fourth of pure farming households, one fourth of the half-farming, and one half of the non-farming, where it is only the housewives that work at home. Households with more than 3 hectares of land have 90% of farming and half-farming households. It is noteworthy, that among the households with more than 8 hectares of land, there is already one fourth of half-farming works, which indicates, that the process of disintegration of the farming households has in the recent times started in Sereborci as well. (Table No. 3).

Land utilization.

The total area of Sereborci comprises 675 hectares and 96 ares. Three fourth of it are taken by cultivated land. Field-surfaces are predominant - 335 hectares or 49% of the total area; next come the meadows - 131 hectares, or 19,6%, ~~xxx~~ after them come 30 hectares or 4,4% of orchard, 12 hectares or 2,1% of vinyard. ~~xxx~~ The forest occupies 154 hectares or 23%; there are only insignificant patches of waste land. (Table No. 1). The proportions between the land categories and the categories of landowners show fields in every case in the first place. The proportion between meadows and forest differs ~~ix~~ with all groups of landowners, some have more meadows, other more forest. For the size of land categories two sources of infor-



Picture No. 3. A village street with village homes.
An older part of the village.

mation have been drawn upon: the cadaster and the statistical data from the registration of farm economy in 1960. The data given by the two sources are seldom identical. The statistical registration from 1960 compared with the cadastrarian data shows 10 hectares less land, 7 hectares more meadows, 2 hectares less vineyards, and 1,5 hectares less orchard. The differences are due on the one hand to the different criteria of registration, and on the other one, to the process of turning worse-quality ~~lx~~ fields, orchards and vineyards into meadows.

The manner of land utilization

Although in the recent years the professional structure of the farming works has been showing changes in all directions, there are no traces of changes in the ways of land utilization. The way of tilling the land is in all social and ownership categories very similar. The backward way of tilling the land, which predominated until recently, is slowly mixed with more modern ones. The tillage with stock is only slowly replaced by tillage with machines.

As the raising of stock is very well developed, stable dung is everywhere used as manure, to which fertilizers are added. Potatoes and maize are manured with stable dung; rye and wheat with stable dung and fertilizers; meadows at certain places with dung.

The crops are sown in three ways: in a three-year rotation system and in two variations of a four-year rotation system.

- I) the three year rotation system: 1) wheat
2) rye - turnip or buckwheat
(stubble field crop)
3) maize or potatoes

AVERAGE NUMBER OF STRIPS PER 1 LANDOWNER ACCORDING TO THE SOCIAL AND THE OWNERSHIP CATEGORIES

The social and the owner- ship categor.	FIELDS ha,a	MEADOWS ha,a	ORCHARD ha,a	VINEYARD ha,a	GARDEN ha,a	PASTURE ha,a	FOREST ha,a	WASTE LAND BUILT-UP ha,a	T O T A L ha,a
0 - 0.5	0.8	0.2	0.2	0.1	-	-	0.1	1.2	3.0
0.5 - 2	2.3	2.1	0.6	0.5	-	-	1.5	1.7	9.0
2 - 3	4.6	3.4	1.5	0.7	0.2	-	2.0	2.1	14.8
3 - 5	6.3	4.5	1.2	1.3	0.3	0.03	3.7	2.0	19.6
5 - 8	7.9	6.0	1.6	1.3	0.1	0.06	3.9	2.2	23.2
8 - 10	7.5	6.1	1.7	1.8	0.2	0.1	7.7	2.0	27.1
above 10	10.3	8.2	2.1	1.9	0.05	0.3	7.5	2.5	33.0
T o t a l	6.5	5.0	1.4	1.2	0.1	0.0	4.1	2.0	20.8

THE AVERAGE SIZE OF STRIPS PER 1 LANDOWNER ACCORDING TO THE SOCIAL AND THE OWNERSHIP CATEGORIES

The social and the ownership categories	FIELDS ha,a	MEADOWS ha,a	ORCHARD ha,a	VINEYARD ha,a	GARDEN ha,a	PASTURE ha,a	FOREST ha,a	WASTE LAND BUILT-UP ha,a	T O T A L ha,a
0 - 0.5	0.12	0.7	0.10	0.11	-	-	0.5	0.2	0.7
0.5 - 2	0.27	0.12	0.14	0.7	-	-	0.17	0.2	0.15
2 - 3	0.34	0.12	0.10	0.7	0.53	-	0.20	0.3	0.18
3 - 5	0.34	0.16	0.16	0.6	0.2	0.7	0.18	0.3	0.20
5 - 8	0.39	0.20	0.16	0.10	0.3	0.20	0.32	0.3	0.26
8 - 10	0.50	0.24	0.22	0.9	0.1	0.3	0.37	0.4	0.32
above 10	0.53	0.30	0.22	0.13	0.2	0.10	0.39	0.4	0.35
T o t a l	0.41	0.21	0.17	0.9	0.2	0.11	0.31	0.3	0.26



Picture No. 4. A village street with homes. A more recent part of the village.

- II) a four year rotation system: 1) wheat
2) rye - turnip or buckwheat
3) clover
4) maize or potatoes

- III) a four year rotation system: 1) wheat
2) rye - turnip (stubble field crop)
3) potatoes or maize
4) clover

Small landownership and the scatteredness of the strips on the village territory makes only modest forms of mechanization possible, mostly just those confined to draught cattle or horses.

On the average, there come 21 strips of land on one farming works; 6 field strips, 6 meadow strips, 4 forest strips, 1,1 strip of vineyard, and 1,4 strip of orchard (Table No. 5).

The average size of a strip is 26 ares; in detail - of a field strip - 41 ares, of a meadow strip - 21 ares, of a vineyard one-
of an orchard strip - 0,9 are,
0,9 are, and of a forest strip - 31 ares (Table No. 6).

All the land is cultivated. Farmers assist in their work one another. Bigger farmers help the smaller ones with draught cattle, horses, machines, and the smaller ones help them with their labour in turn. For those kinds of work that ~~will~~ require a lot of hands at a time, as this is the case with harvest or thrashing, the help comes besides from the neighbours from the ^eimmigrated relatives, who come back into the village at such occasions.

For land tillage, the village has at disposal: 119 ploughs, 176 harrows, 34 sowing frames, 2 mowers, 138 straw-cutters, 58 vine-presses, 9 alembic retorts, 92 other machines. Besides, there are

Utilization of farming surfaces

land categories and crops	ha, a	percentage of field-surfaces	percentage of farming surfaces	percentage from group A,B,C,D II,III
I. FIELD SURFACES	325.30	100	X	X
A/ Extractive crops	200.32	61.6	39.5	100
wheat	87.73	27.0	17.3	43.8
rye	78.44	24.1	15.5	39.1
barley	4.15	1.3	0.8	2.1
oats	17.79	5.5	3.5	8.9
millet	12.21	3.7	2.4	6.1
B/ Intensive crops	85.58	26.3	16.9	100
maize	30.59	9.4	6.1	35.7
potatoes	35.77	11.0	7.1	41.8
vegetables, together	5.41	1.7	1.0	6.3
onions, garlic	0.2	0.0	0.0	0.0
capsicum	0.10	0.1	0.0	0.1
other kins	5.29	1.6	1.0	6.2
beetroot, carrots	4.25	1.3	0.8	5.0
sugar beet	1.34	0.4	0.3	1.6
sunflower	0.2	0.0	0.0	0.0
flax, hemp	0.1	0.0	0.0	0.0
other industrial crops	8.19	2.5	1.6	9.6
C/ Fodder crops	37.88	11.6	7.5	100
lucerne	0.3	0.0	0.0	0.1
clover (black)	34.70	10.7	6.8	91.6
vetch, tare	0.74	0.2	0.2	1.9
other fodder crops	2.41	0.7	0.5	6.4
D/ Unsown land	1.52	0.5	0.3	100
II. PERENNIAL CROPS	39.86	X	7.9	100
orchard	28.54	x	5.7	71.6
vineyard	11.32	x	2.2	28.4
III. PERMANENT GRASSLAND	141.41	X	27.9	100
meadow	138.24	x	27.3	97.8
pasture	3.17	x	0.6	2.2
T o t a l	506.57	x	100	X

in the village two threshing-machines, one is private property, the other one ^{is} owned by the co-operative farm.

The land-utilization orientation

The ~~fr~~ outskirts of *Pannonia*, where Sereborci lies, are characterized by the general orientation towards the production of cereals. Up to World War II, 90% of field surfaces in Prekmurje were sown with cereals. ⁺The percentage of surfaces sown with cereals is owing to the re-orientation towards stock raising with every year growing smaller. In 1962 it amounted in Sereborci to only 62%. The quick re-orientation is to be set down on the one hand to the dairy recently built in Murska Sobota, which daily buys off any quantities of milk, and on the other hand to large possibilities of selling young stock to a factory of meat products in Murska Sobota or for export. As the role of stock raising is growing and the surfaces sown with cereals are getting smaller, the production of fodder crops is growing in importance from year to year.

The utilization of field surfaces

5 crops prevail on the fields. Among the cereals these are wheat and rye, among the crops requiring hilling potatoes and maize, and among the fodder crops a (black) kind of clover. Wheat and rye occupy together 50%, maize and potatoes 30%, the remaining 20% ~~fr~~ is taken by the rest of the crops. A typical feature is also the sowing of high-quality grass for seeds, used for grassland surfaces in towns (park), which gives on small areas a relatively high yield (Table No. 7). The yields of wheat, maize, potatoes, and rye are compared to the average yields in Slovenia high.



Picture No. 5. An old type of a farming home. The home is "in the key". The house is built of loam, wood and it is thached. In recent years this type of house is being replaced by a brick-built and larger house.

The yield of wheat per hectare (20,5 q) corresponds to the Slovenian average and is for 3 q higher from the Yugoslav. The average yield of maize is 33,5 q per hectare and is higher both from the Slovenian (28,7 q/ha) and the Yugoslav yield (23,9 q/ha). The yield of fodder crops, particularly of lucerne is comparatively low (58 q/ha) and is below the Slovenian average yield (61 q/ha).

Comparatively small percentage of cultivated land is taken by gardens, which are normally distributed around or in the vicinity of houses. In the gardens various kinds of vegetables are grown, like ~~xxx~~ red pepper, tomatoes, salad, and some other garden plants, all grown mostly for home use.

Perennial crops/

Among other economic branches, Sereborci have a rather developed growing of orchards and vineyards. Both ~~xxxxxx~~^e branches had in the various periods of the economic development a variable role. The conditions of climate are favourable for orchards as well as for vineyards, the long and warm autumns being particularly appropriate. Decades ago, the growing of vineyards was more important than the growing of fruit-trees. On the slope of the tertiary hills each farmer had at least one bigger or smaller strip of vineyard. In post-war years the growing of vineyards is in retrogression- the continuous repairs in the vineyards call for considerable means, pains and hands, of which there is in recent times due to ~~xxxx~~ emigrating a growing shortage. In most of the vineyards they grow "šmarnica" also called "samorodnica"; most of the plantations are old. The size of the vineyards is rapidly diminishing. Most of the grapes ~~xxx~~ is used for the production of poorer-quality wine, consumed mainly at home.

Orchards are distributed around the houses and on the slope of the tertiary hills between the vineyards. Among the sort the most numerous are apple-trees and plum-trees. Each sort is represented by ~~some~~ ^{about} 2000 trees. The remaining sorts are: pear-trees, cherry-trees, mahaleb-cherries, pach-trees, ^{and} ~~and~~ nut-trees - altogether about 800 trees. With the retrogression of vineyards, the orchards are growing in importance, which is also evident from the number - one third - of young trees^e. The orchards are carefully cultivated. Fruit is intended for home-use, for making brandy, and for sale.

Permanent grasslands

Grassland has no particular significance in Sereborci and it occupies relatively poorer and less favourable tracts of the village land. The breeding of cattle is not to a large degree dependent on hay, but more on a mixture of straw and clover. According to the quality and character, the meadows may be classified in three groups: The first zone of meadows is on the poorer moist ground with the unregulated brooks and covered with alder-wood and acacia. The second zone is protracted along the fringe of the forest and nearly everywhere grown over with shrubbery. The third zone extends near the houses below the orchards. The meadows are not regularly manured. They are cut ^{twice} ~~in~~ a year. In autumn, however, the meadows ~~are~~ situated near to the village are partly used for pasturage.

The forest

There is little forest on the territory of Sereborci and it is broken up into three complexes. The first bigger zone of forest is on the southern part of the village territory, the second one is on the eastern tertiary hills, and the third one, which is in turn broken up into smaller complexes, is on the northern^{er} ~~border~~ border of the village territory.



Picture No. 6. An old type a farming house- "a protracted"home",
of a farming household with 5 hectares of land.

On the moist ground near the brook white beech, alder-tree and acacia are mostly found; on the tertiar hills we get a mixture of pine-tree, beech and oak. The preponderance of one kind of tree varies from one strip to another. The forest is privately owned and is devided up into strips. Farmers utilized it until recently for their private needs unsystematically, mostly for heating and building. Consequently, the trees seldom reach mature age. Practically everywhere the immature type of forest prevails, old from 20 to 30 years. The younger forest, up to ten years old, prevails near the brooks. Trees of mature age are to be found only sporadically. As the use of wood in building has decreased in recent years, and as more and more coal is used for heating, a more rational forest economy is on the way. The size of the forest has slightly grown in the last 50 years; parts of field surfaces on the tertial land had to be a-forested owing to the increasing erosion.

The settlement

The settlement of Sereborci is a typical example of a village, the houses of which are all distributed along the roads.

In its outward appearance the village is completely a farming one. In the village there is still a considerable number of houses built of wood and loam, and covered with straw. Before Woold War I a number of houses got modernized in the style of Panonian hope. Since World War II some urbanized worker's houses have been erected.

Most of the homes are built in "a key", the first part being the home, the second the stable and the third the farmstead. With a protracted type of home those functions follow ^{one} ~~two~~ another in the same order.

Vegetation production

Crops	ha,a	yield in q/ha	yield in q	corn unit	produc- tion in corn units	percen- tage of vegeta- tion pro duction	percen- tage from I,II,III
I. FOOD CROPS	259,5	X	X	X	5792,1	54.7	100
wheat	87.7	20.0	1754.0	1.0	1754.0	16.6	30.3
rye	78.4	16.5	1293.6	1.0	1293.6	12.2	22.3
millet	12.2	13.2	161.0	1.0	161.0	1.5	2.8
potatoes	35.8	198.6	7109.9	0.25	1777.4	16.8	30.7
vegetables	5.6	x	x	x	224.6	2.1	13.9
onions	0.2	184.5	36.9	0.3	11.1	0.1	0.2
capsicum	0.1	70.0	7.0	0.3	2.1	0.0	0.0
other kinds	5.3	133.0	704.9	0.3	211.4	2.0	3.7
fruit	28.5	24.0	684.0	0.4	273.6	2.6	4.7
grape	11.3	54.5	615.8	0.5	307.9	2.9	5.3
II. FODDER CROPS							
maize	30.6	33.9	1037.3	1.0	1037.3	9.8	22.4
barley	4.1	21.0	86.1	1.0	86.1	0.8	1.8
oats	17.8	15.4	274.1	1.0	274.1	2.6	5.9
beetroot, carrots	4.2	340.9	1431.7	0.1	143.2	1.4	3.1
lucerne	0.3	47.0	14.1	0.5	7.1	0.1	0.2
clover (black)	34.7	48.2	1672.5	0.5	836.2	7.9	18.1
vetch, tare	0.7	46.2	32.3	0.13	4.2	0.0	0.1
other kinds	2.4	60.0	144.0	0.1	14.4	0.1	0.3
hay	138.2	40.0	5528.0	0.4	2211.2	20.9	47.8
pasture	3.1	16.9	52.4	0.3	15.7	0.1	0.3
III. INDUSTRIAL CROPS	9.8	X	X	X	163.6	1.6	100
sunflower	0.2	12.0	2.4	2.0	4.8	0.1	2.9
sugar-beet	1.3	330.6	429.8	0.25	107.4	1.0	65.7
flax, hemp	0.1	50.0	5.0	0.25	1.2	0.0	0.7
other ind. crops	8.2	24.5	200.9	0.25	50.2	0.5	30.7
Total	505.4	X	X	X	10585.2	100	

Vegetation production

The intensive cultivation of land is best reflected in the comparatively high yields per hectare. The average worth of vegetation production per 1 hectare ~~is~~ of agricultural land is 20,9 corn units; 23,9 corn units per 1 hectare of field surface, 16 corn units per 1 hectare of meadows, 5 corn units per 1 hectare of pasture, and 14 corn units per 1 hectare of orchard.

The total absolute vegetation production of the village amounts to 10.585 corn units. The production of food crops occupies more than 50%. Among food crops wheat and potatoes take the first place. The production of wheat amounts to 1.754 corn units or 16,8% of vegetation production. Potatoes bring 1.777 corn units or 16,8% of vegetation production, the production of rye and meslin 1.397 corn units or 12% of vegetation production.

The production of fodder crops amounts to 4.629 corn units or 43,7% of vegetation production. The most important crop among fodder crops is maize with 1.037 corn units or 10% of vegetation production. It must be stressed in connection with maize that in this part of the country maize is used for food as well. Among strictly fodder crops first comes clover with 836 corn units or 8% of the total vegetation production. Vegetation production on the meadows amounts to 2.211 corn units or 21%.

Industrial crops are in the process of expansion; so far only a comparatively smaller part of the field surfaces has been sown with them. The total production of industrial crops is 163 corn units or 1,6%.

Orchard and vineyard are in the physiognomy of the landscape

Structure of live stock

(The number of animals; animals in stock raising terms, proportions of those numbers to farming surfaces and to farming population)

Kind of animals	number	animal units	total number	percents of animals according to kinds of anim. surfaces	number of animals per 100 ha of farming surface	number of anim. units per 100 ha of farming surface	number of animal units per 100 of farming population
I. HORSES	34	X	44.2	7.6	6.7	8.7	9.8
horses	34	1.3	44.2	x	x	x	x
II. CATTLE	497	X	396.55	67.8	98.1	78.3	87.9
calves up to 5 mont.	61	0.15	9.15	x	12.0	1.8	2.0
cows	162	0.7	113.40	x	32.0	22.4	25.1
bulls	274	1.0	274.0	x	54.1	54.1	60.8
III. SHEEP	2	X	0.2	0.03	0.4	0.1	0.1
sheep	2	0.1	0.2	x	x	x	x
IV. PIGS, SWINE	694	X	116.21	19.9	137.0	22.9	25.8
pigs up to 5 mont.	287	0.03	8.61	x	x	x	x
pigs	290	0.25	72.50	x	x	x	x
swine	117	0.30	35.10	x	x	x	x
V. DOMESTIC FOWL	1795	X	26.91	4.6	354.4	5.3	5.9
hens	1717	0.015	25.75	x	x	x	x
ducks	53	0.015	0.79	x	x	x	x
geese	12	0.015	0.18	x	x	x	x
turkeys	13	0.015	0.19	x	x	x	x
Total	X	X	584.07	100	X	115.3	129.5

rather noticeable, yet the production compared to other crops remains somewhat low, amounting in the total to 580 corn units or 5,5%. The production of fruit amounts to 273 corn units and the production of grapes to 308 corn units (Table No. 8).

Stock raising

Until the last years before World War II, stock raising was in its significance behind the agriculture. At that time it was dependent on the production of low-quality fodder on meadows and in winter mostly on straw. Since World War II stock raising has gained in significance, particularly due to the food factories in Murska Sobota as well as to the planned purchasing of stock. More and more of the field surfaces are being sown with fodder crops. Stock raising is getting modernized, above all, by a careful choice of breed. Farmers have taken to breeding above all young cattle for butchery, cows, and pigs. The number of stock expressed in animal units is 584. Of that number there are 396 animal units of cattle, (= 67,7%). Pigs are second in number - 116 animal units or 19,9%, then horses - 44 animal units or 7,6%, and domestic fowl 27 animal units or 4,6%. The economic significance of domestic fowl is not satisfactorily expressed in animal units, since the selling of eggs represents, similarly to the selling of milk, regular and significant income (Table No. 9).

Stock-raising production

For a survey of stock-raising production we have at disposal the data for the production of milk, for the production of cattle and pigs sold for butchery and stock, and for the production of eggs. We do not possess data ^{for} ~~of~~ the ~~meat~~ production of meat that was

Production from stock-raising

Kind of product	number of animals	average yield	production	corn unit	production in corn units	percentage in corn units
A						
Milk	274	1500 l.	411.000 l.	0.75	3.082	57.3
meat						
calves	9	70 kil.	630	5.0	31	0.6
cattle	28	450	12.600	6.0	756	14.0
swine	156	1000	15.600	5.0	780	14.5
Eggs						
hens	1717	95	163.115	0.25	407	7.6
Total	X	X	X	X	5.056	36.7
B						
Sold for Stock						
calves	35	70 kil.	245	5.0	12	0.2
swine	31	80	2.480	5.0	124	2.3
cattle	7	450	3.150	6.0	189	3.5
Total	X	X	X	X	325	6.0
Total from A & B :	X	X	X	X	5.381	100

Global production
Survey of the farm production

production in cultivated land and pastures	production in corn units	percentage in corn units	percentage of the group
A/ Food crops	5 792	36.3	100
wheat	1 754	11.0	30.3
rye	1 294	8.1	22.3
potatoes	1 777	11.1	30.6
vegetables	224	1.4	3.9
fruit and grape	582	3.7	10.1
other food crops	161	1.0	2.8
B/ Fodder crops	4 629	29.0	100
maize	1 037	6.5	22.5
oats	274	1.7	5.9
clover (black)	836	5.2	18.1
meadows	2 211	13.9	47.8
other fodder crops	271	1.7	5.7
C/ Industrial crops	164	1.0	100
sugar-beet	107	0.6	65.2
other industrial crops	57	0.4	34.8
T o t a l	10 585	66.3	
production from stock raising			
D/ Milk	3 082	19.3	100
E/ Meat	1 567	9.8	100
pork	780	4.9	49.8
beef	756	4.7	48.2
veal	31	0.2	2.0
F/ Eggs	407	2.5	100
G/ Sold for stock	325	2.0	100
T o t a l	5 381	33.7	
T o t a l of A,B,C,D,E,F,G :	15 966	100	100



Picture No. 7. A more recent farming house, built after World War 1, of a farming household with more than 10 hectares of land.

consumed at homes in the village. As these quantities are comparatively great - each household butchers yearly one to two pigs - we cannot get an objective insight into the stock-raising production. According to the data at disposal, the first place in the worth of the stock-raising production is taken by milk - 3.082 corn units or 57,3% of the total stock-raising production. The worth of the yearly production of cattle and pigs sold for butchery amounts to 1.536 corn units or 29%. The worth of swine/sold for breed and calves amounts to 313 corn units or 5,8% of the stock-raising production. The production of eggs is 407 corn units or 7,6% (Table No. 10).

Global production

The total production of the village is 15.966 corn units. Here, vegetation production participates with 10.585 corn units (66,3%), and the stock-raising production with 5.381 corn units (33,7%). The actual share of the stock-raising production is larger, as we have already mentioned that the production of meat for the home-use has not been taken into consideration. So we can assume, that the real worth of the stock-raising production comes fairly near to the vegetation production.

The total production of 15.966 corn units per 505 hectares of agricultural land, or 31 corn units per 1 hectare is comparatively good (Table No. 11)

The facts that the production of food crops occupies 36,3% of the total production, the production of fodder crops 29% and the production from stock raising 33% indicate, that the production is orientated towards stock raising and agriculture.

BIBLIOGRAPHY/ AND SOURCES:

- 1) A. Melik, Štajerska s Prekmurjem in Mežiško dolino (Štajerska, together with Prekmurje and Mežiška dolina) Ljubljana, 1957.
- 2) S. Ilešič, Die Flurformen Sloweniens im Lichte der europäischen Flurforschung, Münchner Geographische Hefte, H. 16, München 1959.
- 3) S. Ilešič, Problemi Pomurja v geografski osvetlitvi. (The Problems of Pomurje from a geographical point of view). Svet ob Muri II - 1, Murska Sobota 1956.
- 4) Instrukcija szczegołowego zdjecia uzytkowania ziemi, (Instructions for general mapping of land utilization), Warszawa 1962.
- 5) Land Utilization in Nieborow, published in Problems of Applied Geography, Warszawa, 1961.
- 6) Podatki kmetijskega popisa 1961? (Data given by the Registration of Farming Economy), Zavod za statistiko LRS.
- 7) Użytkowanie ziemi i gospodarka rolna w wybranych wsiach Bulgarii. (Land utilization and farming economy in selected villages in Bulgaria).
- 8) Podatki o izrabi tal in stanju kmetijskega gospodarstva zbrani z anketiranjem in kartiranjem na terenu. (Information concerning land utilization and the state of farming economy collected through questionnaires and mapping on the locations)