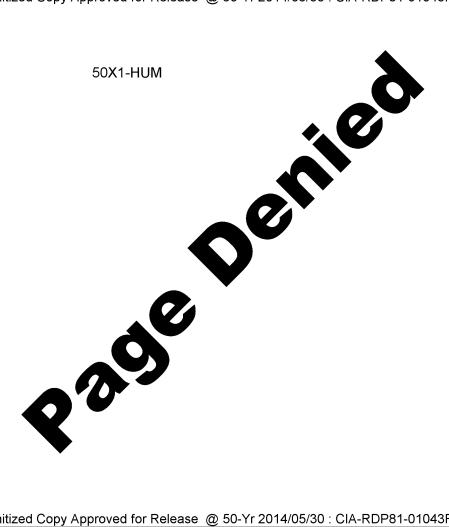
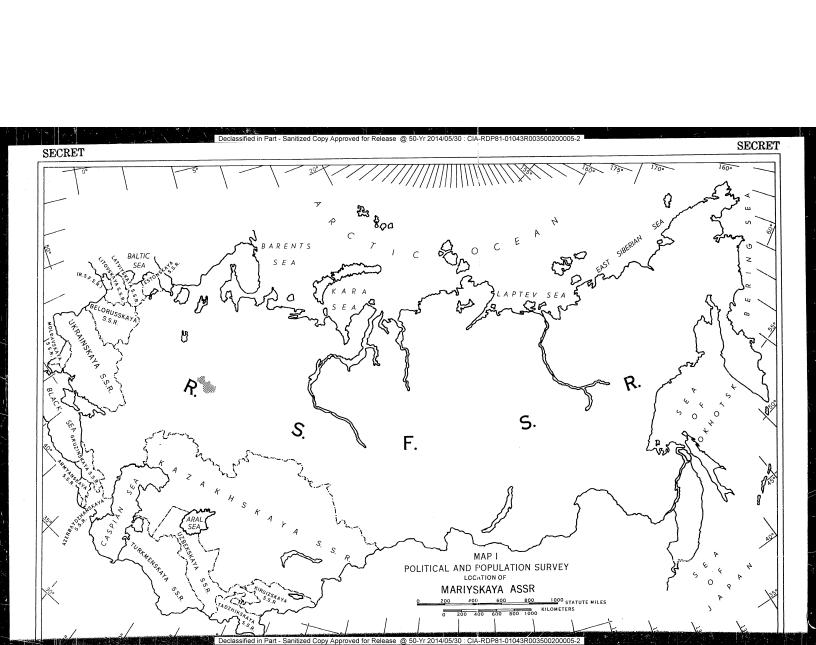
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Political and Population Survey

No. 88

MARIYSKAYA ASSR

Prepared by

Air Research Division Library of Congress

13 February 1959

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# Political and Population Survey

# MARIYSKAYA ASSR No. 88

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#### MARIYSKAYA ASSR

# Statistics

Area in Sq. Miles	. 8,958
Total Est. 1959 Pop	
Urban Pop	162,000
Rural Pop	508,000
Cities	1
(Yoshkar-Ola)	
.Towns	2
(Kozmodemyansk and Volzhsk)	
Urban Settlements	10
Rural Rayons	20
Selsovets	177

## I. Government Controls

## A. General

The area of present-day Mariyskaya ASSR was formed as an autonomous oblast in 1920 and subsequently included as such in Nizhegorodskiy Kray (later known as Gorkovskiy Kray). When Kirovskiy Kray was separated from Gorkovskiy Kray in 1935. Wariyskaya Autonomous Oblast remained in Gorkovskiy Kray. On 5 December 1936, it was constituted as the Mariyskaya Autonomous Soviet Socialist Republic. There have been no major territorial adjustments since its establishment in 1936 except for internal changes which involved increasing the number of rural rayons from 18 to the present 20.

The republic is located in the central part of European USSR and was part of the old Central Industrial Region. The Volga River, one of the principal waterways of the USSR, runs through the S part of the republic. Mariyskaya ASSR is bounded by Kirovskaya Oblast on the N and NE, Tatarskaya ASSR on the SE, Chuvashskaya ASSR on the S, and by Gorkovskaya Oblast on the W.

1 -

The total estimated 1959 population is 670,000 which represents 0.31 per cent of the total population of the USSR and 0.56 per cent of the total population of the RSFSR. The over-all density of the republic is 75 persons per square mile. About one fourth of the republic's population lives in urban areas, about 50 per cent of whom are located in Yoshkar-Ola, the capital and cultural center of the ASSR.

The economy of the republic is essentially agricultural (mostly grain); the most important single economic activity is the lumber industry, including such allied activities as the manufacture of paper, cellulose, and wood products. Industrially, it has little nationwide significance since in 1956 the republic represented only 0.244 per cent of the USSR's gross industrial production; 0.375 per cent of the RSFSR's; and of the old Central Industrial Region, 0.426 per cent.

As an autonomous republic, Mariyskaya ASSR has its own Supreme Soviet and Council of Ministers as the highest local state organs which are the approximate equivalents of an Oblast Soviet and its Executive. Committee. These organs are subordinate to agencies of the RSFSR government. The chief Party organ in the ASSR is the Oblast Committee of the Communist Party, which is directly responsible to the Bureau for RSFSR Affairs of the USSR Central Committee of the Communist Party in Moskva. Significant economic control is exercised by the Mariyskaya ASSR Council of National Economy (Mariyskiy Sovnarkhoz) which is subordinate to the RSFSR Council of Ministers. The republic also has its own Supreme Court whose junges are elected by the Supreme Soviet of the ASSR.

# B. Control Groups

The Mariyskaya ASSR control force is estimated to total 25,300, 3.7 per cent of the total republic population, and 7.4 per cent of its labor force. It includes all those who direct, supervise, and coordinate

<sup>1/</sup> In an Autonomous Republic (ASSR) the highest ranking Party Committee is call the Oblast Party Committee, rather than the Autonomous Republic Party Committee. Also, for convenience in this report, the Antonomous Republic is frequently referred to simply as "the republic."

the activities of the population. The degree and scope of control depends upon the level of the control force to which they belong: the primary, intermediate, or lower control force. This applies to the Party, government, military, and economic components of control. In each of these components, the primary control force is composed of those responsible for policy making and general administrative functions; the intermediate control force of those responsible for the supervision and implementation of policy, adapting and applying it to specific areas; and the lower control force consists of those supervisory-administrative personnel at the operational level and clerical aides of control force supervisory-administrative personnel.

The control force, as a whole, represents the power elite of Soviet society. The varying degrees of power and influence it commands determine not only the individuals, share of prestige but also their economic status. Thus the power elite is distinguished not only by its office but by its wealth.

Component	· Primary ·	.Intermediate	Lower	· Total.	Per Cent
Party Civil	neg.	. • • 200•	· . 700	.900	3.5
Government Economic Military	neg. 100: neg.	1;500 · · · · · · · · · · · · · · · · · ·	. 5 <b>,3</b> 0 16 <b>,</b> 700 100	6,800 17,400 200:	26.9° 68.8 .0.8
Total	100	.2,400.	22,800	25,300	100:0

# 1. Communist Party and Komsomol

The most important arm of control, the Communist Party, has a 1959 estimated membership of 16,600, or 25 members per 1,000 total population, which is considerably lower than the 39 members per 1,000 total :

population for the USSR as a whole. Information on Komsomol (Communist Youth League) enrollment is not available. The primary Party control force of the Autonomous Republic (reported as numerically negligible in Table I) consists of a handful of officials in the republic, representing the Party Central Committee and its agencies where all basic decisions originate, whether political, economic, or military. The intermediate Party control force in the republic consists of approximately 200 members, including a few workers of the USSR Central Committee's Bureau for RSFSR Affairs detailed to the republic, and officials of the oblast and city Party Committees. The lower Party control force, consisting of an estimated 700 Party members, includes workers in the rayon Party committees, full-time paid employees of Party primary organizations, and clerical employees of oblast and city Party committees. These workers are the chief agents of direct communication between the Party authorities and the remaining 15,700 Party members, and to some extent, between the Party and the population as a whole.

The hierarchical structure of the Party in the republic follows the usual pattern: under the direction of the Bureau for RSFSR Affairs of the USSR Central Committee of the Communist Party in Moskva, the Oblast Party Committee of the republic oversees the work of local Party Committees in each city, town, and rural rayon in the republic. However, since the XX Party Congress in 1956, several important changes have occurred in the Party's methods of control. The special Party agencies directing the activity of Party organizations in the MVD militia (regular police), railroad transport, merchant marine and civil air fleet, and the positions of Party organizers from the center attached to large plants and institutions have been abolished. The personnel and functions of these former agencies have been absorbed by the appropriate territorial committees. The Oblast Party Committee in the republic now controls all Party activities, with the exception of military and security Party units.

The structure of the Komsomol, for youths between the ages of 15 and 28, is similar to the Party organization: the oblast, city, and rayon Komsomol committees are each responsible to the next higher Komsomol committee and are supervised by the Party Committee at the same level.

Party and Komsomol organizations in military units possibly located in the republic are exempt from oblast, city, or rayon Party committee supervision and have their own control apparatus. The Main Political Administration, which functions both as a section of the USSR Central Committee of the Communist Party and as a part of the USSR Ministry of Defense controls the activities of Primary Party Organizations in military units located in the republic through special offices at Hq., Volga Military District, in Kuybyshev (Kuybyshevskaya Oblast). Party organizations in militarized MVD units in the republic also are independent of local Party authorities and are responsible, through their own hierarchy, to the USSR Central Committee of the Communist Party.

# 2. Government

ASSR is to provide services such as public health, education, housing etc. and to exercise control over one-third of the republic's economy. The total control force of the civil government is estimated to be 6,800, or 26.9 per cent of the total republic control force (see Table I). The primary control force consists of a few administrative-supervisory personnel of the central apparatus of the USSR government who oversee the governmental and economic activities of the republic. The intermediate control force is estimated to contain 5,300 persons. This group is composed of administrative-supervisory personnel of the ASSR Council of Ministers, and city executive committees, and of institutions funded through local budgets, and is responsible for the implementation and specific adaptation of policies and programs formulated jointly by the primary control force of the government and of the Party. In so doing,

they are expected to cooperate with the intermediate echelon of the Party. Harmony between these 2 groups is facilitated by the fact that the highest officials in the intermediate governmental control force are also members of the comparable Party agencies. The lower segment of the government control force is estimated to total 5,300 and consists of administrative-supervisory personnel of rayon and rural soviets, and clerical aides of administrative-supervisory personnel funded through ASSR, city, and rayon and rural budgets.

# 3. Military

Mariyskaya ASSR contains no identified Army, Air Force, or militarized MVD units or headquarters; also, no information is available on the number of militarized MVD personnel in the republic. Moreover, the predominantly rural character and heatland position of the republic does not necessitate the presence of any significant military component. The estimated 400 Air Force personnel in the republic are probably subordinate to Hq., Volga Military District, in Kuybyshev, as are any Army personnel which may be stationed in the republic. Militarized MVD forces in the republic, in there are any, would be subordinate to the RSFSR Ministry of Internal Affairs.

Yoshkar-Ola Airfield (Target 0155-8008), a natural-surfaced military field with runways 9,000 to 9,999 ft. in length, is located 8 miles N of Yoshkar-Ola. It is the only targeted airfield in the republic.

The area of the republic is under the jurisdiction of 3 air defense districts. The major portion of the republic is within the Volga Air Defense District, Hq., Kuybyshev; a small area in the NE section of the republic is in the Sverdlovsk Air Defense District, Hq., Sverdlovsk (Sverdlovskaya Oblast); and a small area in the N is located in the White Sea Air Defense District, Hq., Arkhangelsk (Arkhangelskaya Oblast). Any radar sites which might be located in the republic would be subordinate to the Hq. of the air defense district in which they were located.

Owing to the very small military component, the total military control force includes roughly 200 Air Force personnel divided almost equally between the intermediate and lower control force, with none in the primary echelon. The intermediate control force is made up of Air Force equivalent of field and company grade officers. A large number of this echelon are members of the Communist Party. For the entire military component of the USSR it has been reported that 86.4 per cent of all officers in the regular armed forces are members of the Party or Komsomol, depending on their age. This high membership is a safeguard against ideological deviation in the armed forces. The lower control force is composed of Air Force noncommissioned officers, about half of whom are Party members.

## 4. Economic

The economic control force of Mariyskaya ASSR, estimated at 17,400, or 68.8 per cent of the total republic control force, is the largest component of the control force in terms of numbers; but in influence it is not the most powerful since the major decisions are made by the primary control force of the Party. Members of the economic control force range from chairman of the Sovnarkhoz down to foreman of a labor group on a collective farm, and may roughly be described as the "managerial class" of the republic. Each member, whatever his level of control, bears a degree of responsibility for the fulfillment of economic plans. Within that part of the economic control force concerned with locally administered industry and construction, agriculture, communications facilities, and trade, supply, procurement, and public catering, the lines of authority follow the administrative-territorial structure. For the remainder of the economic control force, they vary according to the type of activity: for that segment concerned with industrial and construction activities subordinated to the Sovnarkhoz, they run from the enterprise or construction site to the Sovnarkhoz headquarters in Yoshkar-Ola, the RSFSR Council of Ministers, and to the USSR Council of

Ministers; for those segments dealing with railroad transportation, for example, the lines of authority run from stations, yards, and shops to appropriate divisions of the Kazan Railroad System, in Kazan (Tatarskaya ASSR), to the USSR Ministry of Transportation, in Moskva.

Prior to the decentralization of the administration of industry and construction in mid-1957, economic policies and plans for all significant economic activities in the republic were determined in Moskva. Today, however, approximately two-thirds of the economy is controlled by the Sovnarkhoz. The Sovnarkhoz, organized by and directly subordinate to the RSFSR Council of Ministers and composed of a chairman, deputy chairman, and members, functions as the highest ASSR administrative and coordinating agency for industrial and construction enterprises of greater than local significance within the ASSR. It elaborates and implements current and long-range production plans, promotes industrial specialization, arranges delivery of raw material and semifinished products, and determines financial and economic acts of subordinate agencies. Below the central apparatus of the Sovnarkhoz are functional departments and administrations, production (branch) administrations, and an advisory technical-economic council. The functional agencies handle such problems as finance, labor and wages, education, and economic planning. The number and type of branch or production administrations depend upon the economic activities of the region. Therefore, the Mariyskiy Sovnarkhoz probably has branch or production administrations for the lumber industry, the food processing industry, and for any of the industries in the ASSR which require a production administration for its activities. The technical-advisory council is composed of directors of the major enterprises, chief engineers and designers, production innovators, and leaders of the Party, government, and trade union organs in the economic region.

The intermediate economic control force consists of the staff of the branch directorates of the Sovnarkhoz and forms the group which

applies policies and plans drawn up at the primary level to specific groups or enterprises. The lower economic control force includes 16,700 individuals who occupy administrative, clerical, and technical positions at the plant or enterprise, in transportation, in telecommunications, and in agricultural enterprises such as collective farms or repair technical stations in the republic.

# II. Population, Labor Force, and Ethnic Composition

## TABLE II

SUMMARY OF DEMOGRAPHIC CHARACTERISTICS: 1959

Total Population	670,000 162,000 24
Population in Working Ages (16-59)	386,000
	57.6
Females Per 100 Males in Working Ages	117
Total Labor Force	341,000
Per Cent of Population in Total .	
Labor Force	50.9
Military Personnel	
(Army and Air Force)	Neg.
Forced Laborers	Neg.
Per Cent Great Russians in	١ -
Total Population	. 49

The estimated 1959 population of Mariyskaya ASSR is 670,000 including negligible numbers of forced laborers, militarized MVD personnel, and military personnel. The republic contains an estimated 0.31 per cent of the total population of the USSR and 0.56 per cent of the total population of the RSFSR.

The over-all population density for Mariyskaya ASSR is estimated to be 75 persons per square mile, compared to 24 for the USSR, 18 for the RSFSR, and 109 for the old Central Industrial Region. The rural population density is estimated to be 57 persons per square mile. Almost half of the urban population is located in Yoshkar-Ola. Most of the remaining are located in urban areas along the Volga in the SW and S-central areas

of the republic: mainly in Gorno-Mariyskiy, Volzhskiy, Zvenigovskiy, and Yurinskiy Rayons (see Table III and refer to Map III).

Rural densities are highest (roughly 104 persons per square mile) in the E rayons where agriculture predominates and lowest (roughly 39 persons per square mile) in the timber-rich rayons of the W section of the republic.

TABLE 111

ESTIMATED POPULATION BY ADMINISTRATIVETERRITORIAL DIVISIONS: 1959

Administrative-Territorial	·· ·:F	opulation	••••
Division	Total	·Urban ·	Rural
Rayons:			•
Gorno-Mariyskiy Kazanskiy Khlebnikovskiy Kilemarskiy Kosolapovskiy Kuzhenerskiy Mari-Turekskiy Medvedevskiy Myrkinskiy Novo-Toryalskiy Orshanskiy Paranginskiy Pektubayevskiy Ronginskiy Semenovskiy Sernurskiy Yelasovskiy Yurinskiy Zvenigovskiy	45,000 17,200 27,000 25,800 17,200 25,800 17,200 31,700 59,400 20,100 20,100 20,100 25,800 27,100 20,100 43,70 25,80 45,600 36,100	7,000	23,000 17,200 23,000 25,800 17,200 25,800 17,200 28,700 31,600 20,100 20,100 20,100 20,100 21,600 21,600 21,600 21,600 21,600 21,600 21,600
Area of the City of Yoshkar-Ola	79,000		• • • • • • • • • • • • • • • • • • • •
Total		162,000	508,000

In the intercensal period, 1926-1939, the total population increased 20.2 per cent. The rural population during this period increased only.

.0.9 per cent, the result of the effects of famine and collectivization in the early and mid-1930's and of rural to urban migration during the

intensive period of industrialization beginning with the First Five-Year Plan in 1928. There was a rapid growth of the urban population, starting from a small initial base, during this period. The urban population grew from 20,000 in 1926 to 75,900 in 1939, an increase of 280 per cent. This rapid increase was the result of a combination of factors: rural to urban migration, reclassification of rural populated points as urban areas, and some in-migration from outside the republic.

The present estimated total population (670,000) is only 16 per cent greater than it was in 1939. This small increase in 20 years is largely the result of the decline of the birth rate during and immediately after World War II. A later contributing factor is the probable out-migration from the republic's rural areas, probably to such areas of the USSR as "Kazakhstan and Siberia."

The total 1959 urban population is estimated to be 162,000, about 113 per cent over the 1939 urban population. Today, one-fourth of the republic's population is urban and about one-half of that urban population is located in Yoshkar-Ola. This urban growth was largely a result of rural-to-urban migration within the republic, although there was some in-migration from outside the republic and those who came probably settled in urban areas. For example, some industrial workers from the threatened areas of western USSR were re-located in Yoshkar-Ola during world War II.

TABLE IV
POPULATION CHANGES: 1926-1959.

Total	Urban	Per Cent	Rural	.Per Cent
Year Population	Population	Urban	<u>Population</u>	Rural
1926 482,100 1939 579,500	20,000	4.1 . 13.1	462,100 503,600	95.9 86.9
1959 670,000	162,000	24.2	508,000	75 <b>.</b> 8.

Great Russians and Mari (often referred to as Cheremiss) constitute most of the republic's population (see Table V). The number of Great Russians and Mari are about equal, the Great Russians slightly more numerous. About 5 per cent of the population is composed of Tatars, Chuvash, Udmurts, Bashkir, and Mordvinians. Great Russians, who began settling in this region in the second half of the 16th century, predominate in the urban areas. Mari are found in all parts of the republic. Tatars are located mainly in the rayons contiguous to Tatarskaya ASSR and the Chuvash in those rayons bordering Chuvashskaya ASSR.

TABLE V ... ETHNIC DISTRIBUTION: 1926, 1939, 1959

•		· ·			•
•	1926 ·	. 1939	•	199	59 .
Ethnic Group	Popula- Per Cer		er Cent Total ·	Popula- tion	Per Cent of Total
Russian Mari Others	210,000 44 248,000 51 24,000 5	266,000 .272,000 _41,000	46 · · · · · · · · · · · · · · · · · · ·	328,000 308,000 34,000	49 46 <u>5</u>
Total	482,000 · · · 100	. 579,000	.100	670,000	100
	• •				

About 58 per cent of the total population of the republic is in the main working ages (16-59). The sex ratio in this group is 117 females to 100 males, which corresponds to the USSR ratio for this age group. The sex ratio of the republic's total population is 112 females to 100 males, slightly lower than the USSR ratio of 113-100. It is estimated that the adult population (age 18 and over) numbers about 438,000, constituting approximately 65 per cent of the total republic population.

The republic's total labor force, virtually all of which is civilian, represents approximately 51 per cent of the total population and 88 per cent of those in the working ages (16-59). The labor force for the USSR, as a whole, represents 55.8 per cent of its total population and 88 per cent of those in the working ages. Workers and employees

TABLE VI
ESTIMATED AGE AND SEX COMPOSITION: 1959

Age Group	Male	Female	Total	Per Cent of Total
0-15 16-59 60 plus	114,000 178,000 23,000	115,000 208,000 32,000	229,000 386,000 55,000	3 <sup>1</sup> 4 58 <u>8</u>
Total	315,000	355,000	670,000	100

account for about 38 per cent of the total labor force of the republic, somewhat lower than the USSR's 46.1 per cent, but this is to be expected since the republic has very little industry. Since the lumber industry is chiefly active in rural as well as urban areas, many of the republic's workers and employees are in rural areas. The number of collective farm workers, estimated at 55 per cent of the total labor force, is higher than the USSR percentage (40 per cent) since the republic's agricultural economy is proportionately larger.

TABLE VII
ESTIMATED CATEGORIES OF EMPLOYMENT: 1959

Categories.	Number	Per Cent of Total
Workers and Employees	131,000	38.4
Collective and Individual Farmers	186,000	54.5
Cooperative and Non- Cooperative Handicraftsmen Military Personnel Others1	4,000 Negligible 20,000	1.2 Negligible 5.9
Total	341,000	100.0

<sup>1/</sup> Includes persons who by definition are excluded from reported categories (defense workers, full-time Party and Komsomol officials, and self-employed persons).

# III. Psychological and Sociological Factors

# A. Political and Social Tensions

There is no evidence of any open hostility toward the regime in Mariyskaya ASSR at the present time. However, there are several possible sources of tension and dissatisfaction in the republic, one of which is the fact that the population of the republic is almost equally divided into Mari and Great Russians whose cultural backgrounds differ considerably. The Mari (also called Cheremiss) are a Finnish people whose language belongs to the Finno-Ugric sub-family of the Uralic family of languages. By now, however, their language has become diluted by Russian and Tatar.

The history of the contact between Russians and Mari is one of almost continual resistance on the part of the Mari against the Russians. In the long conflict between the Tatars and Russians the Mari remained faithfully on the side of the Tatars and fought the Russians for 3 centuries. In 1445, the Mari supposedly sent 30,000 troops against the Russians; even when Tatar rule was weakening and Ivan the Terrible became Grand Prince of Moskva in 1533, the majority of the Mari continued to resist Russian pressures until the overwhelming consolidation of Russian power after the fall of Kazan in 1552. Only the "Mountain Mari" who live S of the Volga and even today speak a different dialect from that of the "Meadow Mari" supported the Russian drive; but this support was late and largely in the interest of self-preservation. The number of "Mountain Mari" in the republic today is small. After the defeat of 1552, the Mari maintained a revolt against Moskva for over a year. Again in 1572 they began a rebellion which proved short-lived since the anticipated aid from the Tatar Khan of the Crimea was not forthcoming. Towards the end of the 17th century, the landowning Mari were accepting not only Russians but also their Christian religion. Large numbers of Mari became Christians during the reign of the Empress Elizabeth (1741-1762), but pagan practices, surviving to this day, existed as a substructure beneath

their Christianity. Both pagan and Christian Mari took advantage of the Peasant Revolt of 1773 (Pugachev's Rebellion) to fight the Russian rule of Catherine the Great. Later rebellions, including the 1905 revolt of the leather workers in Yurino, may have been based on purely economic grounds, as Soviet historians maintain, but they may also have been influenced by ethnic antagonisms. Through all these struggles and the flood of Russian colonization in the 18th, 19th and 20th centuries, Finnish culture persisted at least until the 1930's among the intellectual Mari.

Sorta (Big Candle) which practices a basically pagan religion with Islamic and Christian features. In addition to its teachings and practices it has been fanatically devoted to the destruction of Russianization whether Czarist or Communist. Very little is known about this organization or its membership.

In addition to the historical resentment against the Russians, the Mari today are largely relegated to an inferior economic and social status in the republic. Although the Mari hold many positions in the ASSR government, the posts are only nominal, and real power is exercised by the Russians. This inability of the Mari to control their own homeland and share equally in the fruit of their labor is a possible source of tension between the 2 groups. Certain aspects of life in the republic may produce dissatisfaction among all groups; poor housing, inadequate medical care and the scarcity of consumer goods are probably resented by the Russians even more than they are by the non-Russians.

The status of the other ethnic groups in the republic is probably the same as that of the Mari, if not even lower; their numerical size does not warrant even the token recognition given the Mari, such as unimportant governmental posts. They could hardly be considered a potential threat to the regime and neither could the few, if any, forced laborers who may be detained in the republic.

## B. Civil Defense

Mariyskaya ASSR has a detailed plan for civil defense, but the extent of its implementation is unknown.

The principal organization of civil defense in the ASSR is the MPVO (Local Civil Defense) which is responsible for coordinating its plans with those of training units and supervising the functions of subordinate MPVO organizations located in the urban rayons of Yoshkar-Ola and the other urban areas and throughout the rural rayons of the ASSR. Town planning and new construction must conform to the needs of civil defense and is subject to the scrutiny and approval of MPVO inspectors.

The organizational structure of the MPVO is hierarchical, headed by the Main Administration of Local Civil Defense (GUMPVO) in Moskva. At each level--USSR, republic, ASSR (or oblast), and rayon--the MPVO is an arm of the official unit of the Ministry of Internal Affairs (MVD) which exists at the appropriate cooresponding level. The MVD's GUMPVO supervises civil defense plans and assists the USSR Council of Ministers in developing civil defense policy. It also cooperates with the office of Air Defense of the country (PVO Strany) which coordinates civil defense plans and is subordinate to the USSR Ministry of Defense.

The basic active unit of the civil defense plan is known as the "group of self-defense." According to the plan, each dwelling, school, farm, institution, or enterprise having 300 or more people has at least one self-defense group. The number of groups increases with the number of people but if an apartment, for example, has less than 300 people, it will share a self-defense group with another apartment of similar size. Sparsely populated rural areas also meet the problem on a cooperative basis by forming "unitary links" or "divisional posts" which cooperate with self-defense groups of other communities.

Each MPVO self-defense group consists of a small staff (chief, assistant chief for political work, property manager, and messenger or

communications manager) and 5 to 8 teams. The self-defense groups are staffed by men between the ages of 16 to 60 and women 18 to 50. All people in these age brackets are required to serve unless they are engaged in some other activity of the MPVO. Various duties include: civil defense training providing assistance to MPVO officers, preserving and maintaining all property which must be protected from air attack, and rendering assistance to those engaged in fire-fighting activities.

The most important civil defense training organization is the Voluntary Society for Cooperation with the Army, Air Force, and Navy (DOSAAF). Civil defense training today is operating under a resolution adopted by the All-Union Congress of DOSAAF convened in Moskva in February of 1958 which states in part that "the training of the whole population in defense against conventional aircraft, atomic attack, and chemical and bacteriological warfare is considered a most important task of DOSAAF." The training is given in 3 stages: the first was a 10-hour basic training program (PAZ) which taught defense against atomic attack. It began in 1955 and was completed in 1956; the second stage covering the period 1957-1958, consists of 22 hours of compulsory training in a general civil defense program including defense against chemical, bacteriological, and nuclear attack; the third stage (1959-1960) is designed to equip all the people of the USSR with practical skills and broad knowledge necessary for implementing modern civil defense measures. In this third, or "qualifying" stage, every Soviet citizen is expected to qualify in all phases of civil defense activity normally expected, in most countries, only of certain highly trained and well-equipped civil defense wardens and Red Cross personnel. If carried out properly, this ambitious program would mean that by 1960 every Soviet citizen would have completed over 40 hours of this technical training. Elaborate as the DOSAAF plan is, Soviet sources indicate many shortcomings in the actual operation. There has been difficulty in obtaining qualified instructors, a lack of training materials, and some apathy toward the whole civil

defense program. This state of affairs probably prevails in Mariyskaya ASSR.

There is no evidence of any plans for large-scale evacuation of the population of Mariyskaya ASSR in the event of an emergency. However, if such an evacuation should occur there are several available avenues of escape. The roads are the best, but they are in poor condition and impassable for vehicles, during certain times of the year they can serve for foot travel. In the more populous northeastern rayons where the roads are more numerous, the inhabitants could evacuate to Kirovskaya Oblast. In the less populated western rayons there are very few roads but there are presumably foot trails and paths.

Railroads are virtually useless for evacuation purposes. In the ASSR there is only one single-track railroad, from Yoshkar-Ola and Volzhsk, leading S to Ulyanovskaya Oblast and Chuvashskaya ASSR (refer to Map IV).

The Volga River crosses parts of the southern border of the ASSR and would be a useful escape route, if it were not for the lack of adequate rail and road approaches to it, and the probable lack of sufficient river craft. Escape by air would be possible only for the high ranking Party, government, and military personnel in Yoshkar-Ola, the site of the only airfield in the republic.

The type of rock formation in the republic precludes the construction of tunnel-type installations and the unstable so make the whole area only moderately suitable for bunker-type installations. However, the latter could be built by utilizing the republic's timber resources in the construction of supports for such excavations.

## C. Medical Facilities

There is a serious shortage of medical personnel, facilities, and equipment in Mariyskaya ASSR. In 1956, there were only 510 doctors or less than one doctor per 1,000 total population, considerably below USSR and RSFSR ratios (see Table VIII). The situation has not improved

# INCIDENCE OF CIVILIAN MEDICAL PERSONNEL AND. FACILITIES PER 1,000 TOTAL POPULATION: 1956

			Doctors	•	Middle M	dical	Personne	1		pital l		
•		•	Per 1,00	00 ·			r 1,000.				1,000	
		Number	Total Popu	lation	Number	Total	Populati	on.	Number · ·	Total	Populati	on
	USSR	310,175		•	800,000	•	.4.0	 	,288,890	: .	6.4	•
	RSFSR	i83,401	1.6		578,900		5.1		761,632	·.· .··	6.7	
	.Mariyskaya ASSR	510	0.76	· · · · · · · · · · · · · · · · · · ·	3,000	••	.4.5		3,730		5.6	

in the past few years, since it was reported early in 1958 that the republic still needed over 350 physicians if proper medical care was to be provided. Although there is no information on the number of doctors in the urban areas of the ASSR, it is very likely that the majority of doctors practice in the urban areas, as is the case throughout the USSR. The Soviet concern for all the needs of industry has resulted in a concentration of doctors in the industrial urban areas, which coincides with the doctors own preferences, as medical facilities and equipment as well as the standard of living are better in the cities. The rural areas must rely to a large extent upon middle medical personnel (mostly feldshers) whose training is limited. Trips are made into the rural areas by airplane, but usually for emergency cases only.

In 1957, medical facilities for children included a 100-bed hospital, a 100-bed bone tuberculosis sanitorium, 54 creches, and 25 consultation clinics. Facilities for women included 24 consultation clinics and 5 maternity homes on collective farms. In 1957, the republic obtained 8 X-ray machines, 4 dentist chairs, 10 medical buses used for sanitation work, 2 trucks, and 2 automobiles to be used for medical purposes:

The major medical problem in the republic is sanitation, particularly in homes. The republic has high rates of illness due to gastro-intestinal ailments and children's infectious diseases caused mostly by poor sanitation programs for which those in public health, including the Red Cross, have been blamed. However, inroads against certain diseases have been made: no fatal cases of smallpox have been reported since 1935 and there has been a sharp decline in the incidence of malaria, with only 26 cases reported in the republic in 1956. The sickness rates for venereal disease, spotted fever, and typhoid fever have also declined. Trachoma, prevalent in the area, is the subject of much research which is reportedly progressing.

There are no institutions of higher learning for medicine in the republic, but there are 3 schools for lesser medical personnel. The 1957 budget for public health amounted to a reported 90 million rubles or 28 per cent of the entire republic budget.

# D. Educational and Cultural Facilities

For the academic year 1956-57, there were a total of 746 schools of general instruction of which 437 were primary, 217 seven-year, and 92 secondary. For the same year there were 87,500 pupils, 38,700 of whom were in grades 1-4, 30,600 in grades 5-7, and 18,200 in grades 8-10. There were a total of 6,000 teachers or about one teacher for every 15 pupils. The republic has 2 institutions of higher learning, a forestry institute and a pedagogical institute, both of which are located in Yoshkar-Ola. There are 14 middle special schools: 2 for forestry, 3 for agriculture, 3 for medicine; and one for each of the following activities: music, pedagogy, the building industry, culture and education, the paper and cellulose industry, and the mechanization of agriculture.

Since there is one teacher for every 15 pupils, the literacy rate for the republic is possibly comparable to, if not higher, than that of the USSR as a whole. But if teachers are in good supply, good plant facilities for the school children are not. One complaint is that there are too many wooden schools in poor condition. In 1959, a need for capital repairs was the basis of a request for an additional 6 million rubles for the republic's school budget and almost 2 million additional rubles were requested for capital repairs of the rural schools.

The chief complaint against Soviet education is that the schools graduate students unable to apply theory to the work situations which they assume after graduation. Consequently, it was announced in 1958 that practical work training will be combined with the general arts and sciences curriculum. In vocational schools training will be made more practical so that the transition from school to work will be

accomplished in an orderly fashion eliminating any readjustment period with on-the-job training which would slow up industrial or agricultural programs. All students without exception will be required to do some work on a farm or in a factory after the completion of their seventh or eighth year of education. After that, the students will work during the day and finish their schooling at evening schools or through correspondence courses, or, as has been suggested, they could work for a certain number of days during the week and attend school on the others. Even the gifted students will participate in this program but the schools which they attend will prepare them for advanced education. The students in institutions of higher learning will participate in the program only in the first 2 or 3 years of study. If they can survive this routine and maintain good academic records, then they may pursue fulltime academic programs performing only that work immediately connected with the curriculum. This education plan is supposed to go into effect in the republic in the very near future.

In 1955, there were 502 libraries in the republic, 98 of which were in urban areas and 404 in rural areas. There were 1,448,000 books in urban libraries and 1,125,000 in rural libraries. In 1957, there were 483 clubs in the republic, only 19 of which were in urban areas. The republic has only 3 theatres, 2 of which perform in the Mari language and one in Russian; early in 1959 an additional 3 million rubles were requested for the improvement and construction of theatres.

There are 40 newspapers in the republic, 3 of which are republic newspapers: Molodoy Kommunist is a Russian-Mari bilingual newspaper; Mariyskaya Kommuna is in Mari, and Mariyskaya Pravda is in Russian. There are 37 rayon newspapers, 19 of which are in Russian, 16 in Mari, one in Tatar, and one Russian-Mari bilingual paper. It is likely that one or 2 of the Mari newspapers are published in the dialect spoken by the "Mountain Mari" who live in the SW part of the republic.

# IV. Socio-Economic Factors

## A. Housing

There is no information on the number of square feet of living space per person in Mariyskaya ASSR as a whole. However, information on housing space in the urban areas warrants the conclusion that the republic has a housing shortage as acute as that which exists in many areas throughout the USSR. The principal causes of the urban housing shortage are the rapid increase in the urban population and the failure to supply sufficient construction workers and materials. Between 1939 and 1959, the urban areas of the republic grew by an estimated 113 per cent. On the basis of 1956 information it is estimated that there were, in that year, 45.2 square feet of housing space per urban person, far short of the USSR standard legal-sanitary norm of just under 96 square feet per person. In an effort to increase housing space, considerable reliance has been placed upon private housing construction. Between 1951 and 1956, over half of the housing in the urban areas was constructed by private individuals. State-constructed housing, however, remains important; in the next few years Yoshkar-Ola plans to build 3 million square feet of multi-storied communal dwelling units and individual houses. Along the main streets of Yoshkar-Ola 4-storied houses will be built and other parts of the city are to have 2- and 3-storied structures. Individual houses will be built in the NW area of the city. In contrast to the earlier construction plans, apartment houses having 2, 3, or 4 rooms for several families will be supplanted by smaller apartments of one or 2 rooms for a single family. This new type of construction will account for a reported 70-80 per cent of all future state-constructed housing.

If the announced plans materialize, the new construction programs will probably use the building materials of the republic which heretofore had been used for industry and priority construction projects. Republic lumber and probably other building materials were shipped down

the Volga for the mushrooming area around the Kuybyshev Dam site.

Construction materials in the republic include lime, cement, bricks,
glass, and a variety of wood products, including prefabricated houses.

Krasnogorskiy is the site of a large house building combine.

Since the rural population grew very slightly between the years 1939-59, it is probable that the housing problem in the rural areas is essentially one of repair and maintenance rather than of space. However, disrepair may have been so great that new construction was necessary, because between 1951 and 1956 almost 50 per cent of housing construction was in rural areas.

# B. Food Supplies

Although the agricultural economy of Mariyskaya ASSR has serious shortcomings, such as poor mechanization and harvests which often fall short of set goals, the republic probably produces and stores enough grain and processed foods to meet the needs of the population. There is probably a scarcity of some items, which may explain the increase in the area sown to potatoes and vegetables between 1940 and 1956, but on the whole, there is no food shortage.

There is an abundance of grain crops, especially winter wheat. Dairy and meat products are more available now than ever before. Various food processing centers in most of the urban areas function as food storage facilities for the urban areas. There are grain storage facilities in Volzhsk and probably in a few of the other larger urban areas.

One of the major factors contributing to the favorable situation in regard to the supply of foodstuffs is the fact that the growth in the republic's population over the years has been relatively small while the increase in agricultural production (swine for example) has been good, in some respects at least. The only possible factor which might offset this situation would be the required export of food from the republic, although it is not known whether this is done or not.

The supply of food available in retail outlets in the republic at the begining of 1956 was sufficient to last 35 days in terms of normal trade turnover, which compares quite favorably with the USSR duration of 34 days and the RSFSR's 37 days duration.

## C. Transportation

#### 1. General

The transportation complex of Mariyskaya ASSR is for the most part inadequate for both industrial and nonindustrial needs. With the exception of rail spurs connecting lumbering enterprises with river and rail transshipment points, there is only one railroad line in the republic. The highways and roads in the republic are, with a few exceptions, in very poor condition and do not provide convenient access to several important neighboring urban areas such as Gorkiy (Gorkovskaya Oblast). Yoshkar-Ola Airfield (Target O155-8008) is the only targeted field in the republic, and it is a military field. By default, river transportation necessarily becomes the most important means of transportation in the republic but because this means is slow and is impaired by the severe weather conditions, it cannot make up the loss occasioned by the absence of adequate rail and highway networks.

## 2. Rail

Excluding the short rail lines used by the lumber enterprises, there is a total of about 92 miles of trackage in the republic, all controlled by the Directorate of the Kazan Railroad System in Kazan. This directorate controls and directs the movement of all civilian and military passenger and freight traffic and operates all stations, yards, and shops within its system. Construction of rail lines and rail facilities, is directed by the USSR Ministry of Transport Construction established in 1954. However, very little construction has taken place since the completion of the Yoshkar-Ola-Zelenodolsk (Tatarskaya ASSR) rail line in 1928. The directorate in Kazan controls the rail facilities in the republic through its division headquarters. The rail facilities in

the republic are most likely subordinate to the Division Headquarters of the Kazan Railroad System in Yudino (Tatarskaya ASSR).

There is only one important rail line in the republic. It is N-S oriented, connecting the republic capital with all major cities of the USSR via Zelenodolsk and Kazan. However, because the republic is unimportant from an economic viewpoint and because the rail line is single-track there is little traffic with these larger cities. This line is extended N to Tursha and connected with Volzhsk in the S to provide service for the wood and paper combine located there (refer to Map IV). The republic's second largest urban area, Kozmodemyansk, does not enjoy the benefit of any rail facilities. The N-S rail line's main function is to support the industries of Yoshkar-Ola, shipping out their various products and supplying them with equipment and fuel. In 1956, 1,709,000 short tons of originating freight were carried by the republic's rail line; for the same year, 1,126,000 short tons of terminating freight were carried. However, Soviet sources admit quite frankly that the entire transportation systems of the republic are inadequate. They assign the absence of railroads as one of the chief causes of the failure to raise the republic's industrial production level. In fact, the railroads today do not even meet the requirements of the existing production level. Vast areas of the republic, including the more densely populated northeastern rayons, are almost isolated as far as transportation is concerned. Consequently, it is proposed to extend a lumber spur from Yoshkar-Ola to Dubovskiy both to provide the W and SW with rail transportation and to transport peat from those areas to the republic capital, where a proposed peat-fed thermal power plant with a 50-75,000 kw. capacity is to be constructed. Also planned is a railroad line connecting the republic with Kotelnich (Kirovskaya Oblast), Kanash, and Cheboksary (Chuvashskaya ASSR). This line (Zelenodolsk-Yoshkar-Ola-Kotelnich) would connect 2 of the most important E-W rail lines linking Moskva and the Trans-Siberian and would do much to increase the transportation significance of the republic.

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# 3. Highways and Roads

The roads and highways of the republic are inadequate both in quantity and quality. It has been reported that 31 per cent of the roads are hard-surface, 68 per cent improved surface, and the remaining one per cent gravel-surface. Such statistics standing alone would indicate that the roads were generally adequate. However, at the same time the sources indicate that with exception of the Yoshkar-Ola-Sermur and Yoshkar-Ola-Orshanka roads, the roads of the republic are generally inadequate because of poor surfaces, improper maintenance, and extreme weather conditions. In spite of these inadequacies, however, use of the roads is being increased. In 1956, 5,792,000 tons of cargo passed over the republic's roads, representing a reported 198.6 per cent increase over 1950. More than a reported 50 per cent of the total republic cargo is carried over the roads at some time during its commercial transport.

Another shortcoming of the reads in the republic is their limited coverage. With the exception of Yaransk (Kirovskaya Oblast) no major cities outside the republic are conveniently accessible by road. Yeshkar-Ola is connected with the densely populated rayons in the NE only as far as Sernur (refer to Map IV).

The construction and maintenance of roads of All-Union significance is the prerogative of the Chief Directorate for Automotive Road Construction attached to the USSR Council of Ministers. Roads of inter-oblast importance are controlled by the RSFSR Ministry of Automotive Transport and Highways. Local roads are subordinate to ASSR, rayon, or municipal Executive Committee Offices for Automotive Transport and Roads. Only the last type of road exists in the republic.

#### 4. Water

Owing to the inadequacy of the other media of transportation, great reliance is placed upon water transportation to support the economy of the republic, particularly the lumber industry. In addition to the many other rivers in the republic, the 4 principal waterways are the

Volga, Vetluga, Bolshaya Kokshaga, and Malaya Kokshaga Rivers which are used extensively for timber floating. Lumber is sent by river to wood and paper enterprises along the rivers and to consumers located in the lower reaches of the Volga. Kozmodemyansk is a large transshipment point for lumber where it is prepared for floating to distant points. Lumber from Gorkovskaya and Kostromskaya Oblasts also is floated through the republic. The total length of navigation and floating lines in the republic comprises more than 932 miles. The smaller rivers are usable by tugs and barges for a length of 158 miles. In 1952, water transportation was responsible for 44.8 per cent of the total freight turnover in the republic. Statistically this figure represents less cargo than that transported over the highways and reads, but, in terms of distances, water transportation plays a more significant role in transportation since highways are mainly used only for short-haul trips, carrying cargo from industrial sites to river and rail transshipment points. In 1955, total lumber shipped amounted to 4,628,000 cubic meters; industrial lumber shipped in 1956 amounted to 2,722,000 cubic meters. Most of this is transported over waterways. In addition to Kozmodemyansk, other port facilities are located at Volzhsk, Yurico, Leninskiy, and at Zvenigovo. In addition to the port facilities at Zvenigovo, there are also shipyards and a snip repair plant.

Freight and passenger traffic and the operations of all port facilities in the Volga Basin are probably controlled by Hq., Volga River Steamship Line, in Kuybyshev, which is subordinate to the RSFSR Ministry of River Fleets.

#### 5. Air

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The one known airfield in the republic is a military field, although it may be put to other uses; it is reported that air transportation is used for medical purposes to reach patients in the remote and inaccessible areas of the republic. Air transportation was also used in 1955 to transport election workers to and from 15 rural rayons of the republic.

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The coordination of all scheduled and nonscheduled civil passenger, mail, and freight air traffic in the republic would probably be controlled by Hq., Volga Directorate of the Civil Air Fleet (Aeroflot), in Kuybyshev, which is subordinate to the Chief Directorate of the Civil Air Fleet in Moskva.

## 6. Telecommunications

All civilian telecommunications in Mariyskaya ASSR are operated by the ASSR Directorate of Communications under the supervision of the Union-Republic Ministry of Communications in Moskva. The Kazan Railroad System, the MVD, and the military control their own telecommunications with technical assistance from the ASSR Directorate.

Mariyskaya ASSR was reported (1957) to have a total of 22 urban and rural rayon telephone stations with a 6,000 number capacity and 4,750 subscribers. Yoshkar-Ola is reportedly connected by telephone to most of the important urban areas in the USSR and to the rayon centers of the republic. The urban areas of Volzhsk, Kozmodemyansk, and Zvenigovo reportedly have semi-automatic telephone systems as do the rural populated points of Sernur, Fokino, Morki, Orshanka, Kuzhener, and Paranga (refer to Maps II and IV). A 300-number station was planned for Yurino in 1957 but no information on its present status is available. Telephones are svailable to 98 per cent of the republic's selsovets; all MTS's (or RTS's); 51 per cent of the collective farms; and to 400 other rural points.

Yoshkar-Ola is connected by telegraph trunk lines with Moskva, Gorkiy (Gorkoyskaya Oblast), and Kazan using the teletype machine; it is also joined by telegraph, probably without the benefit of teletype machines, with Kozmodemyansk, Yurino, Zvenigovo, and Morki.

In 1956, there were 103 radio receiving and wire transmitting centers, a little over 50 of which were on collective farms. These centers control a total of 69,000 radio pick-up points of which 44,000 are in rural areas. About 1,000 populated points and 32,500 collective farm

households can listen to radio broadcasts. There are almost 10,000 radio receivers in the republic. Programs are broadcast in Russian and Mari. A television retransmitting station is to be built this year in Yoshkar-Ola.

#### D. Utilities

### 1. General

Mariyskaya ASSR is not connected to a regional power network and its industrial power needs are supplied by municipal power plants and power plants attached to the industrial installations. For the most part, agricultural needs are presently supplied by small rural power stations and electric generators. The lack of a sufficiently powerful energy potential has always been one of the principal factors retarding both the expansion in the existing enterprises and the construction of new ones. In the rural areas this lack contributes to low level of lumber production.

The numerous rivers, lakes, and ponds in the republic insure an adequate supply of water. However, the necessary utilities for filtering, transporting, and furnishing water to the inhabitants are still in a primitive state of development.

The number of buses is probably small, but what ones they do have undoubtedly do extra service in a republic with so few railroads.

# 2. Electric Power

The municipal power requirements of Yoshkar-Ola are probably supplied by a single municipal power plant with 3,000 kw. capacity, Yoshkar-Ola Power Plant (Target 0155-0050). However, in addition to this plant, many of the industries of the city probably have their own power producing facilities. City improvement plans include the construction of a peat-fed thermal power plant with 50-75,000 kw. capacity. It appears, however, that this project must await the construction of a railroad to import the peat from the W and SW regions of the republic. Peat discoveries in those regions consist of 500 deposits, covering 173,286

acres of land, contain a reported 44,691,867 cubic feet of peat. In addition, it is reported that construction has begun on a high voltage transmission line between Yoshkar-Ola and Zelenodolsk. It is not known, however, how much additional power will be supplied to Yoshkar-Ola as a result of this new line. Volzhsk appears to have adequate heat and power facilities; Volzhsk Power Plant TETS (Target 0165-0150) has an estimated capacity of 25,000 kw. but the wood, raper, and cellulose industries there require some 18,000 kw. of this for their operations. Kozmodemyansk has both heat and power producing facilities, but their number and capacities are unknown.

At the begining of 1954 there were reportedly 154 rural power plants with a reported total capacity of 3,589 kw. Seventy-five of these were hydroelectric, 79 were thermoelectric. The total power requirement of the agricultural economy of the republic has been reported as being 20,000 kw. To make up for the lack of power in the rural rayons, 8 collective farms in Medvedevskiy Rayon and 6 in Semenovskiy Rayon have been connected to the Yoshkar-Ola power plant. There are plans to join the collective farms of 5 other rayons to Yoshkar-Ola and those of 9 rayons to the power plants of Kazan. In 1954, only about 32 per cent of the collective farms had adequate amounts of electricity. It is reported that the collective farms of the ASSR had an average capacity of about 11 kw. in 1954.

# 3. Local Utilities and Transit

Utilities for treating water and supplying it to the inhabitants appear to be inadequate. Future plans for most of the urban areas call for either construction of new water pipelines and sewerage or the repair and improvement of old ones. The water supply generally good throughout the republic, has been increased at Volzhsk by the raising of the level of the Volga River which has formed a reservoir.

In 1957, there were 388 miles of bus lines in the republic which reportedly served all rayons. It is doubtful, however, that bus

trips into the rural areas are frequent or successful because of the disabling effect of the republic's roads. Bus service connects the republic with the Tatarskaya ASSR (Volzhsk-Zelenodolsk).

## E. Economic Significance

#### 1. General

The chief economic activity of Mariyskaya ASSR is agriculture, particularly the cultivation of grain. The raising of other crops such as flax and hemp and the development of animal husbandry also contribute to the agricultural economy of the republic. With the exception of the lumber industry, the industrial complex of the republic is poorly developed. Metalworking is considered important to the ASSR, but its relative importance to the entire metalworking industry of the USSR is negligible. The republic accounts for only 0.244 per cent of the gross industrial product of the USSR and only 0.871 per cent of the gross industrial product of the old Central Industrial Region (refer to Table IX).

TABLE IX

ESTIMATED REGIONAL DISTRIBUTION OF GROSS INDUSTRIAL PRODUCT: 1955

	Per Cent of:				
Region	USSR	RSFSR	Central Industrial Region	Mariyskaya ASSR	
USSR RSFSR Central Industrial	100.000 63.995	100.000			
Region	27.552	43.053	100.000		
Mariyskaya ASSR Yoshkar-Ola	0.244 0.118	0.375 0.183	c.871 o.426	100.000 48.155	

# 2. Agriculture

The total land area in use by agricultural enterprises and farmsteads consists of 2,367,000 acres, of which 1,950,000 acres is farmland. Plowland under tillage consists of 1,633,000 acres and the total area sown to crops consists of 1,284,000 acres.

Grain, mainly winter wheat, forms the most important segment of the agricultural economy. However, the emphasis was shifted and there has been a considerable reduction in the area sown to oats, barley, and millet and a slight reduction of the area sown to winter wheat in order to increase the area sown to fodder. Fodder is sorely needed to increase the number of cattle and swine and raise the republic's level of meat production. In 1956, 4,900 tons of meat were processed in the republic. In 1956, there were 203,000 head of swine which represents about a 270 per cent increase over 1929 just before the hardships of the collectivization period reduced the number of swine in the republic by about 50 per cent. Cattle, however, have increased only 46 per cent over the 1929 figure, and the number of sheep and goats is still below the 1929 figure by about 165,000 head. The area sown to potatoes and vegetables has also increased at the expense of grain (refer to Table X). Since 1954, corn has been introduced on the collective farms as a new Grain crop, and about 15 per cent is used for ensilage.

TABLE X
UTILIZATION OF THE AREA SOWN TO CROPS: 1940-1956

Crop	Per Cent		
	1940	1956	
Grain (winter wheat) Technical Crops Potatoes Vegetables Fodder	81.5 (39.2) 4.0 4.7 0.2 9.6	70.7 (38.5) 3.1 6.4 0.4 19.4	
Total	100.0	100.0	

The major technical crop is flax, which because of its high value is responsible for 15 "millionaire" collective farms, despite the fact that its production is below the pre-war level. Poor mechanization at the crucial harvest time is blamed. Calculated in 15 hp. units, the republic had only 3,731 tractors in 1956, fewer than in most of the surrounding area. Tatarskaya ASSR, for example, had 19,659; Mordovskaya, and Chuvashskaya ASSR's and Kirovskaya and Gorkovskaya Oblasts all had more tractors.

In 1955, there were 540 collective farms, 30 MTS's, and one state farm. Other agricultural activities in the republic include the cultivation of silkworms, bees, fish, and waterfowl, and the cultivation of berries and hops.

#### 3. <u>Industry</u>

In 1955, the industry of Mariyskaya ASSR produced a total product worth 1,635,000,000 rubles which represented 0.244 per cent of the gross industrial product of the USSR. The city of Yoshkar-Ola accounted for about 48 per cent of the republic gross industrial product. In 1957, there were a reported total of 270 industrial enterprises.

The principal industrial activity of the republic is lumbering with its end products of construction materials, furniture, paper, cellulose, wood-chemicals, and various other minor items such as thread spools. More than 50 per cent of the republic's lumbering industry is concentrated in Yurinskiy and Gorno-Mariyskiy Rayons, but significant lumber industries are located elsewhere. Volzhsk has a large woodworking combine and a paper-cellulose combine, Volzhsk Paper Plant (Target 0165-0026), reportedly the most important in the USSR. In 1956, 39,900 tons of paper were produced in the republic. Some form of activity connected with the lumber industry is carried on in most of the larger urban areas of the republic, chiefly those along the Volga River.

Yoshkar-Ola is the site of 3 significant installations, but since metalworking and machine building are listed after the lumber

industry (which includes paper and cellulose production) in terms of the republic's contribution to the gross national product, their output and stores are at present probably small. They are Yoshkar-Ola Optical Plant, "Kaganovich" 297 (Target 0155-0054), Yoshkar-Ola Research and Arms Plant OKB (Target 0155-0066) and Yoshkar-Ola Ammunition Depot, "Mitkino" (Target 0155-0128). Agricultural machinery is also produced in Yoshkar-Ola but the number produced is probably small. Tools, motion picture projectors, small machines, and scales are also produced there. Metal-working and shipbuilding industries are located in Zvenigovo.

The building materials industry is also locally important (refer to Map IV). It is developed mainly in Yoshkar-Ola, Volzhsk, and Kozmodemyansk, based upon the mineral building material deposits of the republic. In 1956, 63,000,000 bricks and 6,300 tons of lime were produced by the republic's building materials industry. Glass for industry and construction, based upon the republic's deposits and quartzite sand, is produced in Yoshkar-Ola, Volzhsk, Kozmodemyansk, Mariyets, Leninskiy, and Krasnyy Steklovar.

The processing of agricultural produce also plays a significant role in the economy; flax processing and meat and butter production have importance. Canned goods, vitamin products, and leather footwear are also produced.

Any significant development of the republic's industries in the immediate future is unlikely. The only local fuels are firewood and peat and even these are not being adequately exploited because of the lack of railroads to transport them to local industries. The shortage of electric power also is an impediment to industrial expansion.

#### V. Urban Areas

#### TABLE XI

#### ESTIMATED DISTRIBUTION OF TOTAL URBAN POPULATION

Population Range	Number of Urban Areas	Population	Per Cent
100,000 and over 50,000 -99,000 25,000 -49,000 10,000 -24,000 9,000 and under	1 	79,000 58,000 25,000	49  36 15
Total	13	162,000	100

Mariyskaya ASSR contains the following urban areas:

Yoshkar-Ola

56-39 N; 47-55 E.

Population: 79,000 (1959 est.)

Administrative: Capital of Mariyskaya ASSR; city of ASSR subordination; Oblast Committee of Communist Party; ASSR Council of Ministers; Mariyskaya Council of National Economy (Mariyskiy Sovnarkhoz); MVD Department of Local Civil° Defense; ASSR Society for Cooperation with Army, Air Force, and Navy (DOSAAF); ASSR Red Cross/Red Crescent Society; City Executive Committee.

Airfields: One Class 5 (military).

Transportation: Kazan Railroad System; steam

engine house.

Economic: Agricultural processing center: brewery, macaroni factory, bakery, oil mill, o flour mill, meat combine, candy factory; flax combine, lumber and paper mills, vitamin plant, furniture factory. Also produces arms, optical and electronic equipment, agricultural machines, glass, scales, skis, machines, tools, motion ° picture projectors, building materials, bricks; motor vehicle repair shop, storage facilities for ammunition. Heat and power plants.

Cultural: Two institutions of higher learning (pedagogy; forestry).

Kozmodemyansk

56-20 N; 46-32 E.

Population: 20,000 (1959 est.)

Administrative: Town of rayon subordination;

center of Gorno-Mariyskiy Rayon.

Transportation: Port facilities on the Volga River.

Economic: Brewery, fruit cannery, fish plant, . vegetable processing, creamery. Lumber enterprises, sawmills, brickyard. Also produces

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musical instruments and furniture. Power plant. Kozmodemyansk (Contd.) Cultural: National Mari Museum. 55-53 N; 48-20 E. Volzhsk Population: 15,000 (1959 est.) Administrative: Town of rayon subordination; center of Volzhskiy Rayon. Transportation: Port facilities on the Volga River. Economic: Lumbering center of All-Union importance. Lumber combine and cellulose-paper combine. Bakery, fat combine, slaughterhouse, oil storage. Building materials, prefabricated houses, bricks, lime processing, glass. Motor vehicle repair shops; grain storage. Power plant. Zvenigovo 55-58 N; 48-02 E. Population: 12,000 (1959 est.) Administrative: Urban type settlement; center of Zvenigovskiy Rayon. Transportation: Port facilities on the Volga River; ship repair plant, ship yards. Economic: Lumber enterprises and food processing; metal working, ship repair plant. 56-18 N; 46-18 E. Yurino Population: 11,000 (1959 est.) Administrative: Urban type settlement; center of Yurinskiy Rayon. Transportation: Port facilities on the Volga River. Economic: Manufacturing of felt boots, mittens, and leather goods. Power plant. 56-11 N; 48-20 E. Krasnogorskiy Population: 4,000 (1959 est.) Administrative: Urban type settlement, located in Zvenigovskiy Rayon. Transportation: Probably port facilities on the Ilet River for lumbering enterprises. Economic: Woodworking combine. Metal last and boot-tree manufacturing. Soap manufactured near by. 56-31 N; 49-51 E. Mariyets Population: 4,000 (1959 est.) Administrative: Urban type settlement, located in Khlebnikovskiy Raycn. Economic: Glass factory. 56-20 N; 48-25 E. Mochalishche Population: 4,000 (1959 est.) Administrative: Urban type settlement, located in Semenovskiy Rayon. Economic: Woodworking.

Krasnooktyabrskiy

56-40 N: 47-45 E.

Population: 3,000 (1959 est.)

Administration: Urban type settlement, located in-

Medvedevskiy Rayon.

Economic: Probably lumber enterprises. .

Leninskiy

56-34 N; 45-56 E.

<u>Population</u>: 3,000 (1959 est.)

Administrative: Urban type settlement, located

in Yurinskiy Rayon.

Transportation: Small port facilities. Economic: Glass manufacturing center.

Suslonger

56-18 N; 48-13 E.

<u>Population</u>: 3,000 (1959 est.)

Administrative: Urban type settlement, located

in Semenovskiy Rayon.

Economic: Sawmills and lumber enterprises.

Dubovskiy

56-21 N; 46-50 E.

<u>Population</u>: 2,000 (1959 est.)

Administrative: Urban type settlement, located in

Gorno-Mariyskiy Rayon.

Economic: Lumber plant and sawmills.

Krasnyy Steklovar

56-13 N; 48-46 E.

Population: 2,000 (1959 est.)

Administrative: Urban type settlement, located in

Morkinskiy Rayon.

Economic: Glass manufacturing center.

