Manpower In Agriculture

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FARM *and* FOOD POLICY

Pamphlet No. **3** *in the Series*

MANPOWER IN AGRICULTURE

by

RAINER SCHICKELE

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WARTIME FARM AND FOOD POLICY SERIES

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To mobilize our nation's giant strength for war necessarily brings drastic readjustments in producing, distributing, and consuming everything we make. Citizens must know what has to be done in economic mobilization—and how and why. This series of pamphlets, prepared by members of the Department of Economics and Sociology at Iowa State College, deals with the what, why, and how of agricultural policy and food management.

Pamphlet No. 1, "Food Strategy," sketched the adjustments in both production and consumption which will be necessary to match food supplies and requirements in a war economy. It outlined the machinery needed to use our food resources most effectively for the conduct of the war at home and abroad.

Pamphlet No. 2, "Farm Prices for Food Production," revealed serious shortcomings in the farm price situation and outlined the adjustments in price policies needed to guide farm production toward an all-out war effort in agriculture.

This third pamphlet, "Manpower in Agriculture," tackles the vital question of how can agriculture produce more food with less labor. What policies should we pursue regarding draft deferments, farm wages, recruiting city volunteers, and increasing food production per worker on the millions of small-scale farms which comprise the backbone of American agriculture? The marshalling of our manpower on farms has become a matter of high strategy in the battle for food production.

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Ames, Iowa, February 20, 1943

MANPOWER IN AGRICULTURE

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PART I. PROPOSED LINES OF ACTION*

The Nation's total manpower resources must be marshalled to serve the supreme purpose of building a powerful fighting force and producing a maximum of war materials and foods. Mobilizing our manpower means helping people shift from present places and occupations to the armed forces and war production according to their physical fitness and skills. Manpower strategy is concerned with weighing the relative needs for soldiers and industrial and farm workers in the total war effort, with matching individual persons and the tasks they are called upon to perform, and with training and helping them to use their labor most efficiently.

The main issues a manpower program for agriculture must tackle, and the general direction in which policy measures should move, are as follows:

1. *Agriculture, taken as a whole, still has more manpower than it needs* for producing war-essential foods up to the maximum limits set by land, feed, and equipment supplies available in 1943. Hence, draft deferments and freezing of farm workers should be applied sparingly and should not prevent a con-

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tinued movement of workers from overcrowded farms and poor agricultural regions into war factories and the armed forces.

2. *Farm labor in 1943 will be scarce and less skilled* on many of the larger livestock farms and in regions where crops require many additional workers for peak seasons. To meet these demands for manpower, farm workers should be helped to move from labor-surplus to labor-deficit areas, draft deferments should be granted in emergency cases, and labor-saving machinery should be provided.

3. *With the year-round manpower available in 1943 on the majority of farms*, livestock production can be further increased. The labor force of the farmer and his family on the typical family-type farm could produce more meat, poultry, and dairy products than in 1942. To put this under-employed manpower to better use, farmers should be provided with additional feed from our bulging granaries, and with equipment as well as advice regarding more efficient production methods. We must look to the millions of small family-type farms for any substantial increases in livestock products over the record level of 1942. The larger and highly commercialized farms are already producing near full capacity of their manpower.

4. *The shortage of seasonal labor* needed for field work and crop harvesting in 1943 will be serious in the vegetable-, fruit-, and grain-producing areas. Part of the seasonal labor demand can be met by pooling manpower and machinery on a community-wide basis; the remaining part must be furnished by recruiting and transporting migrant farm workers from overpopulated rural areas and Mexico, and high school students and other volunteers from cities.

5. *Farm wages are playing a major role* in shifting workers from farms to factories as well as within agriculture from low-wage to high-wage farms. Since, on the whole, differences in wages reflect scarcities of labor fairly well, wages are a powerful

aid in allocating manpower to where it is most needed. By October, 1942, farm wages were still over 20 per cent below par with factory wages on the basis of their 1929 relationship. In 1943, it might become necessary in certain areas to regulate farm wages for the purpose of securing an adequate supply of workers and an uninterrupted flow of war-essential food production. A wholesale freezing, however, of farm wages would greatly hamper effective manpower mobilization. If the prices of certain needed farm products are so low that farmers positively cannot afford to pay adequate wages, these prices should be raised or subsidies granted to help farmers meet the increased wage bill.

PART II. THE FINDINGS

Matching Workers and Jobs

The core of the Nation's manpower problem in 1943 is not so much a lack of employable workers, as it is a gigantic task of transferring people out of one occupation into another, of gauging their fitness for special skills, of training and conditioning them for specific jobs, and of diverting them out of non-essential occupations, schools, housework, and retirement into those activities which are essential to the conduct of the war. This holds for agriculture, for industry, and for the armed forces. Unless we see this problem clearly, confusion and cross-purposes will abound in the various theaters of operation on the home front.

Hence, the major emphasis in manpower strategy should be focussed upon the question: How can our total manpower potential be used most effectively to the end of producing a maximum of military striking power, war equipment, and food?

The question has two aspects: (1) how many people do we need in the armed forces, in industry, and in agriculture, and (2) how can we best utilize whatever manpower we have within each of these three major fields. Military victory might be more quickly achieved by a well-organized army of 8 million than by a less efficiently organized army of 10 million. Some decisions must still be made as to how large an army we want, and how many workers we need to produce sufficient arms and food.

The War Manpower Commission is charged with the arduous task of guiding the distribution of manpower among these fields. Up to the end of 1942, few direct measures for

apportioning manpower seemed necessary. The armed forces recruited men through draft and enlistments as fast as they could absorb them; the war industries attracted millions of workers from all walks of life through offering higher wages; and farmers, despite losing many of their sons, daughters, and hired hands to factories and military services, managed to turn out a volume of food beating any previous record.

During 1943, the labor situation will become increasingly tight. The Manpower Commission must exert more direct controls over manpower allocation. In some production centers, it has already become necessary virtually to freeze certain highly skilled workers to their jobs. Voluntary enlistments have been stopped, and the administration of the Selective Service Act has been transferred from the Army to the Manpower Commission. Occupational draft deferments are being extended to more and more "essential" workers in industry and agriculture, while the draft age has been reduced to 18 years, and health requirements have been lowered. As wage ceilings become effective over an increasing number of jobs, higher wages can no longer be used for attracting more workers of certain special skills, and other more direct measures, such as conscription and freezing of workers, might become necessary over a widening range of occupations.

The marshalling of our manpower resources has now become a matter of high strategy. The armed forces have first priority, on numbers and quality, on those best fitted to assure military victory at the earliest possible time. War industries and agriculture come next. "Non-essential" industries and services, including some household tasks, are residual claimants; they have to get along with whatever is left after the armed forces, war factories, and farms have absorbed the best and largest part of our labor force. This must be the guiding principle of America's manpower strategy.

The agricultural manpower problems will be explored under five major headings:

A. Distribution among agriculture, industry, and the armed forces;

B. The drain of manpower out of agriculture;

C. Year-round farm labor and livestock production;

D. Seasonal farm labor and crop production; and

E. Farm wages and related issues.

A. DISTRIBUTION OF MANPOWER AMONG AGRICULTURE, INDUSTRY, AND THE ARMED FORCES

The farm labor situation is bound to become more serious month by month during 1943 and 1944. Even in 1942, many farmers had to put up with great inconveniences—with uncertainties regarding labor supplies; with fast rising wages; with hired help inferior in skill and dependability; with the necessity of calling upon their women, children, and older relatives to help in field and barn at the expense of housework, comfort, and sometimes even health; and with shortages of labor-saving machinery and equipment. At the same time, farmers are being exhorted to produce more, to the very limit of their capacity.

But manpower is also scarce in war industries. Manufacturers of tanks, airplanes, guns, and ammunition also have to put up with inconveniences—with a dearth of skilled workers; with training and retraining of millions of workers, old and young, men and women, for many specialized tasks; with high labor turn-over and mounting accident rates. They, too, must produce to the limit of their capacity, under increasingly difficult conditions.

And the armed forces are being expanded rapidly, drawing the best manpower from all walks of life, men in their prime of fitness. As they are called upon to risk their lives, to struggle through excruciating hardships in jungles and deserts, in the sky and on the sea—those who are left behind to produce food and guns are called upon to sacrifice comfort, leisure, and convenience.

Obviously, the manpower needs of agriculture cannot be determined apart from those of industry and the armed forces. In order to allocate workers intelligently, definite plans must be formulated regarding the needs for fighting men, arms, and food. Up to the end of 1942, we did not worry much about the grand strategy of manpower allocation, because we entered the war with a huge reservoir of idle men and machines, with ample food stocks, and with a great deal of slack in the use of our labor. At the beginning of 1943, much of this slack has disappeared, and what is left is becoming more and more difficult to eliminate. So far, we have depended almost exclusively upon prices and wages for attracting labor and other resources to where they were most needed. From now on, these will no longer suffice to bring about the best allocation and most efficient use of manpower in the various branches of production. More direct measures are required. Already, draft deferment policies are being revised, some skilled workers being virtually frozen to their jobs, and farm laborers being recruited and transported to areas where labor shortages are acute.

Shifts in Manpower

The *armed forces* have expanded from half a million in 1940 to nearly 6 million at the close of 1942, and are expected to reach 10.5 million at the end of 1943. The farm population contributed, up to January, 1943, a share in military inductions roughly proportionate to its share in the total male population between 20 and 44 years of age, which is 20 per cent. Approximately 1 million farm workers had joined the armed forces, and 4 million had been drawn from the non-farm population. During 1943, the army and navy will require 4 to 4.5 million more men. The Manpower Commission is charged with the difficult task of providing the armed forces with qualified men sufficient to nearly double our

army, and at the same time to facilitate further increases in the production of war equipment and food.

The output of *war industries* must continue to expand. Non-agricultural employment increased from 35 million workers in July, 1940, to 42 million in July, 1942. This growth of the industrial labor force, despite a loss of nearly 4 million workers to the armed forces, was made possible by (1) the reduction of unemployment by 6 million workers, (2) the drawing of 2 million women, youth, and older persons into employment, (3) an increase in total population of 1.5 million, and (4) a net movement of over 1 million workers from farm to factory employment. During 1943, unemployment as a source of manpower will virtually dissappear. Women, youth, and older persons not formerly employed, natural population increase, and shifting of farm workers into non-farm occupations will be the only sources from which the non-agricultural labor force can be increased.

More important, however, than an increase in the total non-agricultural manpower is the proportion which can be converted from non-essential occupations to war production, and the speed and efficiency with which this conversion can be accomplished. The better we succeed in concentrating city workers in war industries, the less we need to draw workers out of agriculture, and the more manpower we can spare for the armed forces without jeopardizing production on the home front.

In *agriculture*, farm employment at the peak month of July was practically the same in 1942 as in 1941, and only slightly below the 1940 level. Yet, around 4 million people—men, women, and children—have left farms from 1940 to the middle of 1942, most of the men and many of the women having gone into non-agricultural employment and the armed forces. The number of farm workers was maintained by (1) an increase in farm population of over 1 million due to high birth

rate, (2) a movement of 1.5 million persons from towns to farms, and (3) the employment of over 1 million youths, women, and older persons living on farms but not previously in the labor force. Despite the loss of so many of the best farm workers, agriculture in 1942, aided by exceptionally good weather, produced 26 per cent more crops and livestock products than in the 1935–39 period. These facts indicate a substantial slack in the use of farm labor. Here, as in industry, the main problem of manpower strategy is not to keep as many people as possible on farms, but to help them concentrate their labor force in the production of essential foods, and to increase efficiency in the use of their labor by improved production techniques. (The reader will find more detailed information on shifts in manpower on page 35).

It must be recognized that the military, industrial, and agricultural groups, as a matter of course, attempt to get hold of as large a contingent of manpower for their particular activities as they can. Hence, the Manpower Commission needs to take a firm and forthright stand in dealing with each of these major groups; it must resolve their conflicting claims on manpower in the interest of the Nation's total war effort.

B. THE DRAIN OF MANPOWER OUT OF AGRICULTURE

A manpower program should not throttle completely a movement of workers out of agriculture into war industries and the armed forces as long as hidden and under-employed labor resources can be drawn upon to increase farm output. The shifting of workers from over-crowded farms and poor agricultural regions into places and occupations where they can work to much greater advantage not only increases the effectiveness of our labor force as a whole, but also puts agriculture in a much stronger position for the post-war period. In fact, this adjustment is long overdue, and the war emer-

gency offers a rare opportunity to reduce over-population in agriculture.

The question then arises: How many and what kind of persons could be drawn out of agriculture into industry or the armed forces during 1943, without hampering further increases in the production of urgently needed foods?

There are two major forces at work which are drawing people out of agriculture: military inductions and high industrial wages.

Draft Deferment Policies

By discontinuing voluntary enlistments, the Manpower Commission has gained better control over the number and quality of men inducted into military services in relation to particular occupations. The Commission and the Department of Agriculture are cooperating in establishing procedures for deferring from the draft "necessary" farm workers producing essential farm products "until such time as a satisfactory replacement can be obtained." The general plan is to interview every farmer and appraise the amount of goods produced per worker on his farm. Production is measured in terms of "war units," which are based upon labor requirements and urgency of need for the various farm products. If a farm worker is subject to the draft, but is producing 8 or more war units, he may, but need not, be granted deferment.[1]

The over-all effect of this standard works in the right direction, since it will permit drafting where output per worker is low and retard it where labor is more efficiently applied. But there is danger that on the better and more highly mechanized farms more workers are kept on farms than are really needed, because there a worker can readily produce 25 or 30 war units instead of 8. If the standard were 16 war units or

[1] A "war unit" roughly corresponds to the average amount of labor needed to keep one milk cow; for example, 1 milk cow, or 3 litters of pigs, or 80 laying hens, or 5 acres of corn, etc., are equivalent to 1 war unit.

even higher, this effect might be partly offset by the stimulus it may give to farmers falling below the standard to increase output sufficiently to meet it. But 8 units is much too low to act as a stimulus to output expansion, since there are relatively few farms with draftable men where the output per worker falls below 8 war units. It is worth mentioning that the Manpower Commission and the U.S.D.A. had originally agreed upon 16 war units as a standard for deferment. But pressure from the Congressional farm block and farm organizations succeeded in slashing the minimum in half. As a result, that standard becomes almost useless as a criterion for deferment. On the other hand, a high standard would discriminate against the small farmers who are lacking in opportunities and capital for expanding output. Application of a uniform standard in all regions is hardly feasible.

In principle, a national manpower policy should recognize that labor is not being fully used on many farms, and that the movement of workers out of agriculture should be restricted only where workers are efficiently employed in the production of essential farm products *and* cannot be replaced, through appropriate measures yet to be developed, by under-employed workers on other farms who are not subject to the draft.

Up to the summer of 1942, various estimates make it appear that the armed forces have drawn men from farms at about the same rate as from the non-farm population. If agriculture's contribution to the armed forces were to continue according to its share in the total population, about one million men would be drawn from farms into military service during 1943. It is quite possible that such a loss in manpower could be sustained without jeopardizing the production goals for essential foods, if the draftees were selected from the least productive farms, and if farmers not subject to the draft were helped to expand output by more efficient use of their labor.

The Lure of Industrial Wages

Draft deferment policies, of course, do not affect the great majority of farm workers, since they are not subject to the draft. The U.S.D.A. estimates that between September, 1941, and September, 1942, nearly 1 million farmworkers shifted to non-farm jobs as compared with 0.6 million to military service. This movement is a response to high factory wages. A later section will deal with farm and factory wages in more detail (See pages 29 and 46).

The rate of migration differs greatly between various farming regions. The estimated loss of farm workers to industry, from September, 1941, to September, 1942, was 22 persons per 100 farms in the Mountain and Pacific States, and only 15 persons in the South.[2] This is not as it should be from the viewpoint of making the best use of our manpower, because the heaviest losses of farm workers occurred where their wages and efficiency are high, and the smallest losses where wages and efficiency are low. The explanation is simple enough. Many war plants are located on the West Coast; although farm wages are high there relative to other regions, they are still low relative to factory wages. In the South, there are fewer war industries, negroes who form a large part of the farm workers are discriminated against in factory employment, and many of the poorer white farmers live in remote hills and don't move readily.

Surely, the income incentives are still the most important means for holding workers on farms. Farmers who can take advantage of high farm prices, or hired hands who receive high wages are less inclined to move into industry than operators severely handicapped in expanding output and income, or hired men receiving low wages and poor living quarters.[3]

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[2] Source: U.S.D.A., *The Agricultural Manpower Situation*, November, 1942 (Mimeo.).

[3] The role of income incentives in guiding agriculture's war production is discussed by T. W. Schultz in "Farm Prices for Food Production," No. 2 in this pamphlet series.

But it might become necessary, during 1943 and 1944, to supplement price and wage incentives by more direct measures of recruiting farm workers in some areas, and keeping them in others. Policies to hasten farm-to-factory migration in the Southern Appalachians and the northern cut-over regions will be all to the good for a better use of workers. In a few other cases, it may be desirable temporarily to freeze certain farm workers in their present farm jobs.

Future policies in regulating farm wages should not interfere with the present tendency to bring farm wages more nearly in line with factory wages. Higher farm wages make for greater efficiency in labor use, and for better economizing of both family and hired labor on the farms. Wage incentives remain a most valuable guide for directing labor to where it is needed most.

Should Farm-to-Factory Migration Continue?

We certainly can expect that the movement of farm workers into industry will continue in 1943. Whether the drain will be larger, the same, or smaller than in 1942 is impossible to say. So far, agriculture has suffered no significant net loss in workers (See p. 37 below).

The "normal" rate of farm-to-city migration has always been high. It amounted to over 2 million per year during the twenties. As a result of depression unemployment it fell to about 1.4 million during the thirties so that a backlog of prospective migrants developed on farms looking for job opporunities to open up again. In 1941, farm-city migration jumped to 2.2 million persons. This loss, however, was partly offset by 800,000 persons moving from cities to farms; the net movement from farms in 1941, therefore, is estimated at 1.4 million. This rate of net migration was twice as high as that during the twenties and 1940. The rate for 1942 is bound to be higher still. Despite the movement, the farm labor force did not decline during the last two years, largely due to an

annual excess of births over deaths of 400,000 in the farm population, and to the drawing of farm youth and women into the labor force.

Farm economists are generally agreed that agriculture as a whole has been chronically over-supplied with manpower. The farm-to-city migration, large as it was, has yet been too small to bring forth proper balance of manpower between agriculture and industry. It has been pointed out repeatedly that 50 per cent of the farmers produced only 10 per cent of the total farm production, that a substantial proportion of the agricultural labor force could be shifted to industry without affecting farm output significantly, and that this over-supply of labor in agriculture was a basic cause for inefficient production methods and for the low income per farm family as compared to city families. The present accelerated movement of workers out of agriculture, therefore, should be in the interest of higher over-all efficiency.

Food needs, however, are mounting, and production goals of most foods are moving to higher levels. Hence, the question arises: should the drain of manpower out of agriculture be allowed to continue? The large number of under-employed and poorly equipped workers scattered over millions of farms leads one to conclude that about 15 per cent of the present farm workers, or roughly 1.5 million, could be spared for jobs elsewhere, and it still would be possible to get further substantial increases in the output of such essential foods as hogs, eggs, dairy products, feeds, and oil-bearing crops in 1943. This, however, will be possible only if the least productive workers are drained off, and if the remaining manpower in agriculture is reorganized and used more efficiently. Ways of accomplishing this task will be discussed in a later section (see p. 42).

Alarm Over Labor Shortage

The fact that agriculture up to the fall of 1942 has suffered

no net loss in workers is surprising in view of the alarm voiced by farm leaders and other spokesmen. How can it be explained?

In the main, it is not a lack in the total number of workers available, but their distribution among farms and the lack in fitness, skill, and dependability of many newcomers, which are disturbing. In addition, there are strong psychological elements which engender anxiety and, in some quarters, almost panic. The following factors account for most of the uneasiness:

(1) There are certain areas and certain types of farms where labor shortages have really become acute and replacements hard to find. The larger dairy farms in some fluid milksheds, and vegetable, sugar, and fruit farms with strong seasonal labor demands, are examples.

(2) The larger farmers who depend to a considerable degree upon hired labor see themselves forced to compete with industry for workers and to raise farm wages. Although farm income increased much faster from 1941 to 1942 than the wages farmers paid their hired hands, it is only natural that farmers resent the rapid wage increases and want to get their hired men deferred from the draft. The larger farmers, although relatively few in number, represent the most articulate part of the farm community and profess, perhaps unwittingly, to speak for agriculture as a whole. Their problems should be fully recognized in a manpower program, but they should not command an emphasis clear out of proportion with their importance in the total farm situation.

(3) Part of the replacement of the farm labor force has been drawn from children, women, or older men, many of whom would normally not have to do much farm work. This means inconvenience to these people and to the operators for whom they work, since quite a number of them, as high school students and town volunteers, are not used to farm work.

(4) The normal migration of farm people to the cities occurred almost unnoticed in peace time. During war, however, a large proportion of the people moving off the farm enter the military services, are seen off by neighborhood farewell parties, and get into the newspaper, while the folks remaining on the farm are being urged to produce more. There is something dramatic about this situation which impresses the public mind. Others leaving the farm are now moving into war industries and earn good wages, while formerly they dispersed themselves over many different walks of life and usually had to start out with low wage rates. The exodus of farm people now is psychologically more impressive to the community mind than it was before the war.

C. THE YEAR-ROUND LABOR FORCE AND LIVESTOCK PRODUCTION

The strategic question in agriculture is: How can the total manpower potential be used most effectively for producing a maximum of essential foods?

A manpower program must distinguish sharply between the *year-round* and the *seasonal* labor force, because entirely different policy measures are applicable. A new job for a year-round worker involves changing residence, moving the family, giving up the present home and community, assuming the risk of failure in the new job, and facing uncertainty of future employment. Seasonal workers, in contrast, usually return to their homes after the crop season. The supply of year-round workers for the individual farm is fixed; the supply of seasonal workers is flexible within fairly wide limits.

In 1942, about 8.5 million year-round workers were engaged in agriculture; of these, only 740,000, or 8 per cent, were hired. *Over nine-tenths of the permanent farm labor force consists of operators and members of their families.* It is upon this type of farm labor that the volume of livestock production depends. Animals need care day-in and day-out, and if livestock prod-

ucts are to be increased, we must look to the year-round workers on the farms to accomplish this job.

In addition, 3.5 million seasonal workers were engaged in farm work during the peak season of 1942, of whom over 70 per cent were hired. The main tasks these seasonal laborers perform are seeding, cultivating, and harvesting of crops. Since the timeliness of field work is all-important in crop production, and lack of suitable workers in a few crucial weeks can ruin a whole crop and waste all the efforts which have been put into raising it, a manpower program must be designed to assure farmers that sufficient seasonal workers will be available to them where and when they are needed.

Let us examine the character of the problems involved in mobilizing these two types of farm labor resources one at a time.

Prospective Size of the Year-round Labor Force in 1943

On the basis of past shifts of workers out of agriculture and the deferment policies now in the making, we might expect a net reduction of 170,000 year-round farm workers. In terms of numbers, this would be a slight loss of less than 2 per cent. But it is likely to come about by a decrease of 250,000 farm operators and hired hands, and an increase of 80,000 unpaid family members, like youths, women, and older relatives. (The reader will find more details on p.37.)

If the drain of regular farm workers should turn out to be heavier, the labor reserves potentially available in farm families could yield larger numbers of workers to replace them. In 1940, there were about 1 million boys 14–17 years of age on farms and not counted in the labor force. But many of them are already performing a good deal of work in the field and around the yard. Perhaps more important as a source of new labor are the 2 million women other than housewives between 14 and 64 years of age, mainly daughters and other relatives, who can be called upon to help with chores and

release the men for the heavier field work. Many of these women have left for city employment since 1940, but probably over a million of them are still on farms. In addition, a substantial number of housewives, particularly those without small children, could help more in farm work than they normally do.

It is highly important that where the production of vital foods is involved, high school and household activities be modified to permit the greatest possible contribution of students and household workers to agriculture's war effort. The labor force of around 2 million persons could thus be released at least part-time for farm work. Perhaps farmers should be urged to offer wages or bonuses to their boys and women folk—which is quite contrary to custom—in order to make farm work more attractive to them.

In any case, it must be recognized that the year-round labor force in 1943, although probably not much reduced in numbers, will be less skilled and more limited in the kinds and the amount of work that it can be expected to do.

Much of the Year-round Labor Force Under-employed

In order to expand livestock production in the face of curtailed year-round manpower, it is necessary to use the remaining labor force more fully and effectively by increasing livestock numbers and output per worker. This can be done on the majority of the farms throughout the country. There are millions of farms with only one or two milk cows, and a few brood sows and hens. Certainly, the labor supply on many of these farms would easily permit doubling or trebling livestock output without additional workers. Such a change alone could bring about a substantial increase over the 1942 level in national livestock production, especially in meat animals and poultry products. Many tens of thousands of Farm Security Administration borrowers have actually doubled

their livestock output without additional manpower. A large share in the total production increase of 1942 over 1941 was contributed by the half million FSA borrowers. An Iowa study reveals that the smaller the farm the more surplus labor there is. Many other observations also point to the existence of under-employment of year-round labor—to a large hidden reserve of manpower, particularly on smaller farms.

Some of the slack in the use of farm labor has been taken up in recent years. Although there were 5 per cent fewer year-round workers in 1942 than in 1935–39, production of meat animals expanded 39 per cent, of poultry and eggs 28 per cent, and of dairy products 16 per cent over the 1935–39 level. Much slack, however, remains to be eliminated. If bold and ingenious policy measures could be applied, it would seem quite possible to increase during 1943 and 1944 several of the most important food products. For instance, hogs and poultry products could probably be increased by as much as 25 to 30 per cent over the record output of 1942, even if 10 per cent of the year-round workers should leave the farm. In addition, further increases in the production of feed grains, oil-bearing crops, and other essential farm products could be achieved. (The reader will find more information on this crucial issue on p. 39 below.)

Mobilizing Manpower for All-out Livestock Production

Four major lines of action should be taken to mobilize the backlog of under-employment and increase the efficiency of labor for maximum livestock production:

(1) A system of *special war production credit, subsidies, and local production campaign leaders* could be developed to induce and enable farmers to secure additional feed, livestock, and equipment and adopt certain simple and well-tested techniques necessary for expansion. The facilities of existing agencies,

such as the AAA, FSA, FCA, State Extension Service, and local banks, and the volunteer services of local farmers could be used to great advantage in a coordinated effort to tackle this phase of the manpower problem. Probably as many as 2 to 3 million farmers could respond to such a program with remarkable production increases, and without requiring additional manpower. Unfortunately, the Food Production Administration of the U.S.D.A. is not moving ahead forcefully enough to develop the necessary programs for these millions of smaller farms, where the greatest chances for further livestock expansion rest.

(2) *Moving farm families and single workers* from very poor, small, and under-equipped farms into labor-deficit areas and larger farms where their labor can be utilized more efficiently. This relocation program would furnish a source for replacements of hired hands or sons drained from the larger commercial farms, so that dairy herds, hogs, and feeder cattle need not be dispersed in auction sales. Moreover, the farm labor force remaining in the area from which workers have moved will be utilized more fully by consolidating the evacuated farms into larger and more efficient operating units. There exists a reservoir of 2 or 3 hundred thousand farm families on poor and small farms from which manpower could be recruited in 1943 and 1944 for relocation on larger farms suffering from labor shortage. Potentially, this source alone could yield around 400,000 workers, sufficient to replace 60 per cent of the total number of year-round hired laborers. About half of them would come from the South, and a quarter from the poorer sections of the Midwest. The Farm Security Administration in cooperation with the Manpower Commission started several relocation projects on an experimental scale in 1942, and plans are being made to expand this phase of the manpower program in the next two years. But it is doubtful whether funds and personnel will be made available

to relocate more than ten thousand year-round workers during 1943.

(3) *Encourage skilled workers on well-managed livestock and dairy farms to stay on their jobs*, by offering them higher wages and better housing and working conditions. In the case of operators in certain specialized types of farming, production bonuses or higher prices, whichever are more desirable, might be offered. Such skilled workers should be granted draft deferment if no replacements can be found despite genuine efforts to find them. Farm incomes on most of the farms employing hired labor are almost certain to be high enough in 1943 to enable farmers to further increase farm wages.[4]

(4) *Arrange for widespread adoption of labor-saving and feed-conserving methods* in livestock production. Priorities for materials used for more milking machines, water tanks, self-feeders, fences, and other equipment should be obtained, and these labor-saving facilities should be distributed among farmers on attractive terms and on the condition of effective use. Similarly, feed grains and protein feeds should be distributed more systematically to farmers who are short on feed or have not been in the habit of buying sufficient feed for the increased livestock numbers they can handle with their labor. Again, local farm leaders and advisors should be organized to help farmers in their neighborhood secure the needed materials and adopt improved production methods.

D. THE SEASONAL LABOR FORCE AND CROP PRODUCTION

Crop work must be done according to the unalterable and often capricious timetable set by the seasons and the weather. In contrast to year-round labor, seasonal workers must be made available according to closely balanced time schedules for definite numbers in specific localities. Seasonal labor

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[4] A discussion of the demand of some farm organizations to include wage rates in the formula of parity farm prices can be found in No. 2 of this series.

requirements are obvious and pressing, and are predictable within fairly close limits. The organizational task of meeting them is relatively easy to visualize, and emergency measures even of a drastic nature may become feasible, as people get aroused when they see crops rotting in the fields.

In 1940, about 3.5 million workers, or 30 per cent of the total farm labor force employed during the peak month of July, were seasonal. It is in this seasonal labor force that the greatest drain has occurred so far, and can be expected to continue in 1943. Because crop work has got to be done on time, no major reduction in the number of workers can be permitted during the peak seasons. As the regular seasonal workers go elsewhere, replacements must be found. Hence, practically the same number of seasonal workers are likely to be needed in the summer of 1943 as in 1942. But as with year-round labor, the skill and fitness of a considerable number of seasonal workers will be less. By and large, there is much less slack in the use of seasonal than of year-round labor on the farms, because most of the seasonal workers are hired only for the time they are urgently needed.

There is no question that seasonal labor shortages will be very acute in many parts of the country during the 1943 crop season. The problem of organizing a seasonal farm labor program will be much more pressing in 1943 and 1944 than it ever was before.

How Can Seasonal Manpower Be Mobilized?

There are five major lines of action which should be pursued vigorously in order to accomplish the job of tending and harvesting our 1943 crop:

1. Farm Women, Youth, and Older People

We have seen that in 1940 there were about 1 million boys of ages between 14 and 17 on farms, and about 2 million

single women between 14 and 64, who were not in the labor force, but were able to work. In addition, a considerable number of the 5 million farm wives could surely be induced to help in farm work more than normally. (See p. 17 above).

It is, of course, difficult to appraise how many of these persons not normally employed can be counted on to do farm work during the peak seasons. By now, some of them are already busy caring for livestock. During summer, schedules of school vacation and household work could perhaps be further adjusted to interfere as little as possible with pressing farm work. If the teen-age girls and the women only take over the livestock chores and lighter farm tasks and thereby release the men for the heavier field work, much can be accomplished. *Farmers must be convinced of the genuinely desperate need for all-out production.* To persuade them of this need is perhaps no small task; but once it is accomplished, the resourcefulness and ingenuity of the farmers themselves can be relied upon to bring forth impressive results. The operators could well afford to offer their family members some remuneration to make the task more attractive to them.

This source of labor usually furnishes more than three-fourths of the seasonal workers in the Cotton South, but only less than one-fourth in the Corn Belt and the Pacific States. Appeal to patriotism and financial inducements will both be needed to overcome the traditional resistance of some family members in the more prosperous farming regions to do more farm work.

2. *Pooling the Manpower Resources of the Neighborhood*

Exchanging labor and hiring workers from neighborhood farms are probably the most important sources of seasonal labor in the general crop and livestock areas. During May, 1942, over half of the seasonal workers were hired from nearby farms. Moreover, it is common knowledge that exchanging

labor on a reciprocal basis is rather widely practiced in the hay and small grain harvest, and observations in the Corn Belt and the Great Plains indicate that in 1942 this practice has expanded markedly over previous years.

In 1939, over 500,000 farm operators reported having worked on other farms for pay an average of 61 days. We don't know how many family members other than the operators worked on other farms, but it surely must be a substantial number. Since small and large farms are found interspersed in most farming regions, neighboring farms are bound to furnish an important source of seasonal labor to the larger farms.

A more systematic organization for exchanging or hiring local labor will be needed to take up any slack left in this labor source in 1943. By a better pooling of the farm manpower on a community-wide basis, perhaps most of the peak requirements in the dairy, Corn Belt, cotton, and general farming regions could be met in 1943. Only relatively small islands of highly specialized crop areas in these regions, like clusters of truck, fruit, and sugar beet farms, will have to depend upon town and migrant labor more heavily than before.

One other aspect of this situation should be mentioned: To the extent to which farmers expand their livestock production, labor reserves formerly available for seasonal work in the community will be partly tied up by the increased load of livestock work. This accentuates somewhat the labor peak for crop work, especially where its timeliness is of utmost importance, as in the small grain and hay harvest.

3. High School Students and Town Volunteers

Students and other town volunteers have been recruited in many communities in 1942 for help in the small grain, corn, and fruit harvest. The mobilization of this labor reserve

requires more systematic organization in 1943. The U. S. Employment Service, in cooperation with State Extension Services, schools, and civic organizations on the one side, and the County War Boards and farmers on the other, should prepare arrangements well in advance of the peak seasons. Plans for mobilizing up to 200,000 high school students are under way. Some will stay with farm families, others in camps, and probably the majority will come from small towns where they can return to their homes at night. In 1942, the YMCA in Southern California organized ten camps with about 1,400 boys to help in the harvest of various crops; Dorothy Thompson organized "The Volunteer Land Corps" and placed 600 city students, mostly boys, in Vermont farm homes for a period of 2–3 months; and many colleges and high schools throughout the country released students for harvest work and cooperated with the U. S. Employment Service in placing them on farms.

There are 4 main problems in organizing this labor reserve from cities and towns: (a) City students and other town volunteers are inexperienced in farm work, and can be used only in simple tasks not involving the use of machines; (b) city people and farmers often find it hard to get along with each other; (c) the rate of turnover is bound to be high, so that farmers cannot depend upon these volunteers sticking to a job until it is done; and (d) in areas where usually regular migrant workers are employed, farmers are tempted to call upon students and town volunteers to keep wages down and evade certain minimum standards of health and housing which sometimes are and always should be required where migrant workers are used.

To some extent, these difficulties can be reduced by orientation and physical conditioning courses for volunteers. They should be prepared for what they must expect and what their function in the total program for agriculture's war effort

ought to be. Great Britain has made great strides in mobilizing town volunteers for farm work. The "Women's Land Army," which numbered over 25,000 in the spring of 1942 and is still increasing, represents a thorough and well-organized effort to replenish the depleted manpower resources on the farm. A large number of these women workers are assigned to specific farms the year round and have been accepted as part of the farmer's family. In this country, however, a wiser policy may be to train city women for industrial jobs and encourage farm workers to stay in agriculture instead of leaving for factories.

4. Migrant Workers

Mobilization of migrant labor crews must be greatly expanded and more systematically organized than ever before. In the past there has been considerable work-time lost by migrant farm workers between jobs during the season, and the recruiting of workers by agents and contractors has been largely haphazard—without coordinating the movement of the workers according to time and place of the labor needs for the various areas and crops. This constitutes the major problem of a migrant labor program.

In the past, the employers of migrant workers have usually had an abundant supply from which they could draw as many workers as they needed upon short notice. Now the situation is radically changed, although many of the employers are only beginning to realize it. The "Hoover-towns" near the city dumps have almost disappeared, and the advertising bills with vague but luring promises of jobs and seemingly good wages for picking peaches and oranges have lost much of their magnetic power. Still, when approached by the U. S. Employment Service, many employers are loath to commit themselves to hire a specific number of workers for a definite time at decent wages; many farmers greatly overstate their demand for workers, but refuse to contract for any. This attitude

hampers severely any attempt at working out a rational system of recruiting and transporting seasonal workers.

In the vegetable, fruit, sugar beet, and western cotton areas, farm employers should be induced to pool their demand for seasonal workers and commit themselves to employing a definite number of them under acceptable terms of wages and housing conditions. Some little progress seems to be made in this direction in Southern California and a few other localities, but unless employers in all the major regions with high seasonal labor peaks get together and make known their true composite demand for workers in time to recruit and transport them there, the Manpower Commission and U.S.D.A. can hardly be expected to cope effectively with acute labor shortages when they arise, and the employers might easily lose large parts of their crops, to the detriment of themselves and the nation. Nursing exaggerated hopes for high school students and town volunteers to handle the harvest means gambling with the nation's food supply.

Early in 1942, the governments of the United States and Mexico reached an agreement concerning the transportation of Mexican workers to American farms. A minimum wage of 30 cents per hour, a guarantee of employment for 75 per cent of the time, and reasonably decent health and housing conditions are stipulated in that agreement. Our government has decided to maintain these same standards for American workers mobilized under its auspices. During 1942, the FSA and U. S. Employment Service cooperated in recruiting, transporting, and placing nearly 5,000 Mexican workers. In 1943, this number might well climb to 40 or 50 thousand. In addition, another 5,000 American workers have been transported in 1942; it should be possible to recruit and transport around 200,000 migrant workers from over-populated farming regions in 1943. There can be no question that even twice that number could be found without hampering production

in the areas from which they are recruited. We probably don't need Bahamian workers for tending Florida's crops, although some Florida farmers are bent upon importing laborers from the Bahamas to work for 15 or 20 cents per hour.

It has been estimated that in 1943 about half a million seasonal workers will have to cross state lines, and one million will have to move across community lines within their states in order to get our crops harvested. These estimates well illustrate the magnitude of the migrant labor problem.

5. Full Use of Machinery

Fullest possible utilization of crop machinery is necessary to meet the seasonal labor requirements for harvesting small grains and soybeans, picking corn, and cultivating cotton and other intertilled crops. There has been a considerable increase in custom work with tractors and machinery in 1942 throughout the Corn and Wheat Belts, but there still is room for improvement. Since the owner of a tractor and machinery cannot be expected to entrust his equipment to strangers, he should be induced to do machine work on other farms, and should be assisted in finding someone to replace him on his own farm. The following measures are suggested:

(a) The county War Boards could be instructed to arrange for full use of the crop machinery available in the county. They could act as clearinghouses for assigning the acreages in each farm neighborhood to specific machines and their owners, and if necessary regulate the rates for custom work. Some pressure may need to be exerted upon machine owners reluctant to cooperate, for instance by granting priorities for repair parts and new machinery only to farmers willing to make their machinery available to other farmers.

(b) Counties short of certain types of crop machinery to handle the respective crop acreages should be given priority over counties adequately supplied, in passing upon individual

requests for new machines. In some cases, the AAA committee could make arrangements with local farm implement dealers to make their new machinery available to farmers on a custom work basis. This might facilitate a fuller use of the machinery than if an individual farmer would own it, and at the same time give implement dealers and their employees a new opportunity to apply their labor effectively in the war effort.

E. FARM WAGES AND RELATED ISSUES

Bitter complaints have come from some farmers about the skyrocketing of farm wages they are asked to pay for hired help of inferior skill and dependability. Some complaints undoubtedly are justified; others probably are not. The deterioration of the quality of hired farm help is a serious matter for the farmer, because the supervision and training in a variety of skills are much more difficult on the farm than in the factory. On the other hand, farm wages in 1941 were still severely depressed relative to their 1929 level, and even in the fall of 1942 they had not regained their earlier relation to factory wages. Many publicized statements on farm and factory wages have been greatly exaggerated. We must remember that farmers' gross incomes since 1940 have gone up twice as fast as the wages they paid to hired workers. The farmers' wage bill, which amounted to 11 per cent of the total cash receipts of farmers in 1929, had fallen to 8 per cent in 1940, and has dropped further to 7 per cent in 1942 despite the rise in wages.

In 1940, farm wages were $28 per month with board, and $37 without board; average factory wages were $104 per month. In the pre-depression year of 1929, which is the nearest year in which our manpower resources were fully employed, farm wages were $41 with board, or 46 per cent above 1940, while factory wages were the same as in 1940. Since 1940, farm wages have climbed faster than factory wages.

In October, 1942, they were 82 per cent higher than in 1940, as compared to a 58 per cent increase in monthly factory earnings. They were, however, still "below par" with respect to their 1929 relationship to factory wages. (For more details, see p. 46 below.)

The wage rates show great differences among farming regions. In October, 1942, they varied from a low of $26 per month in the Southeast, where farm labor is abundant and inefficiently used, to a high of $91 in the Pacific States, where farm labor is scarce. Since farmers had to increase wages if they wanted to keep their hired help, the wage increases in the various regions show fairly well where serious labor shortages are developing. Farm wages from October, 1941, to October, 1942, increased most in the Pacific and Mountain states and the West North Central region, and least in the South Atlantic states.

Certain spokesmen are advocating the freezing of farm wages as well as of workers on farms in order to prevent a further drain on agricultural manpower. Would such a policy be advantageous to the best use of our workers? It has already been pointed out, that in principle the answer is "No." (See page 9 above.) But in certain special cases, some form of wage regulations might become necessary in 1943.

Need for Regulating Farm Wages

There are three phases of the manpower program which are bound to assume major proportions in coming years and in which the government cannot escape the necessity of formulating concrete wage policies: recruiting and placing of migrant workers, mobilizing town volunteers, and relocating year-round farm workers. Whenever a government agency undertakes to recruit workers and make arrangements for transporting and placing them in new jobs, it assumes the responsibility toward the worker that he will find employment

under fair wage and decent working conditions, and toward the employer that he will get a suitable worker for the task to be done. Hence, the public agency cannot be effective in making workers available to farmers unless it can give some assurances and exert some control regarding wage and employment conditions. The Mexican labor program is a good illustration of the public responsibilities involved (See page 27 above).

Another situation calls for definite measures to regulate wages. In some areas the wage rates paid for different jobs by different groups of growers to the same workers in the same localities vary so widely that "labor pirating" on the part of employers, and shiftlessness or independability on the part of workers become rampant. In Florida, for example, producers of peas have offered wages two or three times as high as potato growers can afford to pay, and many workers could afford to take a week's vacation for every week they picked peas instead of getting two-thirds less for the more back-breaking job of digging potatoes. There is a crying need for simplifying, adjusting, and regulating local wage rates in many fruit and vegetable areas. Unless this is accomplished, progress in economizing seasonal labor and distributing it efficiently in time and place among the various crop farms will be slow indeed.

Some Guiding Principles of Farm Wage Policy

The time for regulation of farm wages may soon arrive, and the Secretary of Agriculture has been designated to administer this job. No ceilings on farm wages have been placed for the time being, in recognition of the depressed farm wage level of recent years and the need of keeping efficient workers on the farm. What are the facts and considerations upon which a policy for farm wage regulation should be based?

It is beyond the scope of this pamphlet to develop this

problem. Only a few main principles might be suggested:

(a) *Farm wage rates should be expressed in such terms that they become comparable with factory wages.* In doing so, the goods and services received by farm workers in kind, such as food and housing, should be evaluated on the basis of retail prices and rents charged to city workers for comparable goods and services, and not on the basis of farm prices. On the other hand, various social security benefits such as unemployment insurance, workmen's compensation, seniority rights, retirement funds, etc., to which many city workers are entitled should be considered in the comparison.

(b) *Clear distinction should be made between wages received by year-round and seasonal workers.* In the case of married year-round farm hands, employment opportunities of the wife and children should be compared with those of a similar family in the city. In the case of seasonal workers, employment opportunities outside of farm work during the winter and other slack seasons, transportation costs, and various risks and inconveniences to which they are exposed, should be appraised.

(c) It may well be that if farm wages for year-round help would go to levels comparable with factory wages in some areas, *farmers producing certain essential foods could not afford to pay such wages.* If war necessity should demand the retention of hired help on these farms, the government may be justified either to raise the price of the respective product in that area or to subsidize the farmer specifically for meeting his wage bill. This problem has already become acute on dairy farms near some war industry centers, particularly on the West Coast. A general inclusion of wage rates in the formula for farm price parity cannot be justified on economic grounds.[5]

(d) *The placing of farm wages under ceilings would hasten the drain of workers out of agriculture* as long as farm workers can

[5] These problems are discussed in pamphlets No. 2 and the forthcoming "A Dairy Program Streamlined for War."

find better paying jobs in industry. The informed advocates for freezing farm wages, therefore, are also urging that workers should be frozen to their present farm jobs. Such a policy would be extremely difficult to enforce, except under a general law of labor conscription. Moreover, we have explained earlier why a general freezing of farm workers would not lead to the best use of agricultural manpower. (See page 14 above.)

(e) *Farm wage rates comparable to factory wages may retain a considerable number of farm laborers on the farm*, particularly married workers with children; but it is doubtful whether such wage rates could bring workers from factories back onto the farm. If such a replenishment of agricultural manpower in certain areas or on certain farms is deemed necessary, recruitment of farm workers and operators out of labor-surplus areas and relocating them in those labor-deficit areas and farms is indicated, perhaps combined with temporary draft deferment or freezing orders keeping the present workers on the farm until arrangements for their replacement can be made.

(f) *Various methods of payment should be devised to encourage skill and dependability on the part of the worker*, and ease the very serious problem of supervision for the farmer. Systems of penalties or wage deductions should be developed and administered by the wage-regulating authority.

Policy measures in the field of farm wage regulations should not interfere with the leveling-out process of the extreme wage differences between farm and factory, because the wage mechanism is still a most valuable device to direct labor to where it is most needed. Higher farm wages will inevitably result in increasing the use-efficiency of family labor, and should be administered so as to stimulate greater efficiency of the hired labor force as well. Higher farm wages are the reflection of the fundamental fact that labor has become more valuable in the agricultural production process relative to

land and other resources. Farm operators are benefitting from this increase in the value of labor as much, if not more, than their hired men.

CONCLUSION

A comprehensive manpower program is urgently needed for the 1943 production campaign in agriculture. Even a well-designed price policy could not draw out the large manpower reserves resting hidden and under-employed in the farm and rural town populations, could not redistribute workers fast enough according to where they are most needed—in industry, the armed forces, or in other farming areas experiencing acute labor shortages. As manpower becomes scarcer month by month throughout the economy, and the demand for essential foods rises sharply with our improving fortunes of war—with our expanding armies overseas and with the occupation of countries whose peoples are starving—bold and far-reaching measures to mobilize and apply our limited manpower resources with utmost efficiency become indispensable. We cannot afford to lose the war on our home front by clinging peevishly to our routines and comforts, while our soldiers, sailors, and pilots win it on the battlefields abroad with their lives and untold deprivations.

PART III. SUPPORTING EVIDENCE

In the following, more detailed information will be presented for the reader who wants to examine some of the factual evidence supporting the findings and recommendations. Here, no attempt is made to tell a consecutive story; instead, some crucial data which bear directly upon the various issues raised in Part II, will be briefly discussed. Apart from satisfying the reader's curiosity for facts and arguments, Part III will give him a look into the workshop of an economist.

Shifts in Manpower

Table 1 presents an estimate of the present and prospective size and distribution of manpower. From July, 1940, two months before the adoption of the Selective Service Act, to July, 1942, agricultural employment held its own, while non-agricultural employment increased 19 per cent, and the armed forces increased from a half million to 4 million.

In evaluating the prospect for 1943, it is important to note the great labor reserve of 35 million able-bodied persons, of whom nearly 30 million are women. Many of these are capable of replacing men who have left the civilian labor force as soldiers and sailors. Comparing July, the peak month for the labor force, in 1941 and 1942, this labor reserve in one year yielded 1.5 million persons, mostly women and youth. It is not unreasonable to assume that a similar number could be forthcoming again between July, 1942, and 1943. The establishment of day nurseries, conveniently located, would contribute a great deal to releasing women with small children for war work. There are still many jobs held by men which could be filled by women.

TABLE 1

SIZE AND DISTRIBUTION OF THE NATION'S MANPOWER SUPPLY, JULY, 1940–43

	July 1940	July 1941	July 1942	July 1943 (Estimated)
	In Millions			
Total agricultural employment[1]	12.3	11.9	12.0	11.8
Total non-agricultural employment	35.3	39.0	42.0	43.0
Total unemployment[2]	9.3	5.7	2.8	0.7
In civilian labor force[2]	56.9	56.6	56.8	55.5
In the armed forces[3]	0.5	1.9	4.0	7.5
Total effective manpower supply	57.4	58.5	60.8	63.0
Total able-bodied persons not in labor force[4]	35.2	34.8	33.3	31.8
Total potential manpower supply[5]	92.6	93.3	94.1	94.8

[1] *Farm Labor Report*, U.S.D.A.
[2] *Monthly Labor Review*, U. S. Dept. of Labor.
[3] Assuming 10 million persons in the armed forces by the end of 1943.
[4] *1940 Population Census*. "Able-bodied persons" are persons 14–64 years of age able to work but not in labor force.
[5] Natural population increase in persons of employable age estimated at 750,000 per year, according to the Census Bureau.

In addition, an increase of about 750,000 employable persons can be expected from the natural population increase. The war industries are still expanding at a rapid rate, and a further increase of about 1 million persons in non-agricultural employment during 1942 appears likely. This would leave agriculture at the peak month in 1943 with 200,000 fewer workers than in 1942.

Prospective Change in the Farm Labor Force, 1943

Taking agriculture as a whole, 70 per cent of its total labor force at the peak season (July) is employed the year around, as shown in Table 2. *The great bulk of this year-round labor is furnished by the operator and his family, and only 6 per cent*

of the total workers are year-round hired hands. Livestock production depends mainly on the year-round *family* labor. Hence, shortages in year-round *hired* help need not necessarily affect total livestock production. Slack in the use of family labor could be drawn upon to replace leaving workers and to expand livestock enterprises. Shortages in seasonal labor are bound to be much more critical. About 70 per cent of the additional seasonal workers are hired, and most of them are employed only for the time they are urgently needed. Hence, little slack is likely to exist in the use of seasonal workers on farms.

TABLE 2

COMPOSITION OF FARM LABOR FORCE, UNITED STATES, 1940, 1942, AND 1943 (PROSPECTIVE)

Kind of Labor	1940		1942[6]	1943[7] Prospective (thousands)	Prospective Change From 1942 to 1943
	Number of Persons (thousands)	Percentage of Total Labor Force			
Year-round labor force	8,680	70	8,517	8,350	−167
Farm operators[1]	5,321	43	5,300	5,150	−150
Unpaid family workers[2]	2,620	21	2,514	2,600	+ 86
Hired workers[3]	739	6	703	600	−103
Additional seasonal workers (at peak season)	3,658	30	3,492	3,450	− 42
Unpaid family workers[4]	1,100	9	1,013	1,100	+ 87
Hired workers[5]	2,558	21	2,479	2,350	−129
Total farm labor force	12,338	100	12,009	11,800	−209

[1] Number of farms reporting use of labor, April 1, 1940, *Agr. Census.*

[2] Total unpaid family workers other than operators, April 1, 1940, assumed to work the year around.

[3] Workers hired by the month, last week of March, 1940, assumed to be employed the year around.

[4] Family workers, July 1 (*Farm Labor Report*), minus year-round family workers.

[5] Hired workers, July 1 (*Farm Labor Report*), minus year-round hired workers.

[6] Estimates based upon the *Farm Labor Reports* and the *1940 Census.*

[7] A guess as to how the labor force might be composed in 1943.

The basis for the 1942 estimate of the farm labor force is quite adequate. Table 2 reveals a 2 per cent reduction in the year-round labor supply from 1940 to 1942, and a 4½ per cent decrease in the number of seasonal workers.

When it comes to anticipating the changes in the farm labor force for 1943, the data needed for reasonably reliable estimates are not available to the author. The 1943 figures, therefore, represent a guess as to what the labor force will be. Deferment policies and other measures can materially affect the composition of the 1943 manpower supply, and they should be designed to facilitate the attainment of production goals.

A net reduction of about 150,000 farm operators could be expected as a result of farmers moving off small holdings which are combined with neighboring farms. The work done by 100,000 hired hands in the year-round labor force might be transferred to family members not normally in the labor force or made up by labor-saving devices, either on the same or on other farms. The tightening of the year-round farm labor supply, especially if it is to be used more fully in expanded livestock enterprises, will increase the need for seasonal workers during peak seasons. A net decrease from 1942 of 40,000 seasonal workers could probably be borne without detriment to crop production, if workers are drawn from local farm and town communities, and migrant workers transported from other regions. Exchanging labor among farms in the neighborhood could be carried still farther than in 1942, and this source of labor does not increase the numbers of persons, but constitutes a fuller utilization of local manpower resources. It should be kept in mind that the changes indicated in the last column of Table 2 are net; i.e., the *gross* movement of farm workers off the farms will likely be substantially greater.

In 1940, there were living on farms 9 million males and females between 14 and 64 years of age who were not reported by the census enumerators to be engaged in farm work. In

this group boys and girls from 14 to 17 years totaled 2 million, and housewives 5.5 million. About the same numbers will probably be on farms in 1943. But of the 2 million women 14 to 64 years of age not listed as housewives in 1940, many will have left for city employment in 1943. Probably the majority of these persons, even in 1940, were helping in the garden, with milking, feeding chickens and livestock, and occasionally helping in the field. During 1942, many of them spent more hours in farm work; but it is highly probable that in 1943 they might do much more than in 1942.

The desperate need for food production requires that school and household activities be adjusted as much as possible to least interfere with urgent farm work.

Under-employed Year-round Manpower

Not many people realize that the great bulk of American farms are very small business enterprises. Even if we take out the part-time farms around towns and look only at what we might call the "bona fide" farms, four-fifths of them produced in 1939 a total volume of products worth less than $2,000 per farm, as shown in Table 3. Since on practically every one of these farms are at least an operator and his wife, and on many of them are larger families with children and other relatives able to do some work, the *conclusion is inescapable that a high degree of under-employment does exist on the majority of our farms.* The fact that about 1 million of all farm operators, including those producing less than $250 worth of farm products in 1939, reported having worked off their farms for more than 100 days does not disprove that conclusion.[6]

Livestock production requires labor the year-round. In general, it needs more labor during winter than during the

[6] "Under-employment" as used here simply means a worker could produce in a year substantially more than he does, if he were given better opportunities, more capital to work with, and some assistance in adopting better production methods.

TABLE 3

DISTRIBUTION OF FARMS BY SIZE OF PRODUCT VALUE, UNITED STATES, 1939[1]

Value of All Products Produced per Farm	Number of Farms (thousands)	Percentage of Farms	Average Livestock Product Value Sold per Farm
$250–999	2,746	57	$160
1,000–1,999	1,125	23	630
$250–1,999	3,871	80	300
2,000–3,999	640	13	1,370
4,000 and over	313	7	4,850
Total	4,824	100	730

[1] Source: *1940 Agricultural Census*. The 1,273,000 farms with incomes below $250 or unclassified have been omitted because they cannot be considered as bona fide farms.

crop season, and affords an excellent opportunity to keep the farm labor force productively employed more evenly throughout the year. Cash-crop farming which is not supplemented by livestock enterprises inevitably makes for long slack periods during which labor is under-employed. If, therefore, 80 per cent of the farms produce an average of only $300 worth of livestock products, it is safe to infer that much slack in the use of the year-round labor force does in fact prevail on most of these farms. It is, of course, not possible to expand livestock on all of these farms sufficiently to achieve full employment, because there are many farms highly specialized in crop production, such as wheat, cotton, truck crops and fruits, which are not equipped for livestock and would have to depend almost exclusively upon purchased feed. But on a large proportion—about 2 or 3 million—of these farms, livestock expansion is possible, and could be achieved quickly if the farmers were given effective assistance in doing so.

Even in Iowa, where livestock production per farm is higher than in most other farming areas, a recent survey reveals a great slack in the use of manpower on the majority

of farms. In Table 4, the farms are grouped according to their labor needs if their manpower supply were fully used, and the relations between labor requirements and potential labor supplies are shown. Each group represents one-fifth of the whole sample, and the groups are ranked from large to small labor needs (or size of farm enterprise).

TABLE 4
DEGREE OF LABOR UTILIZATION ON FARMS, IOWA, 1941[1]
(Per Farm)

Groups Ranked by Total Labor Needs per Farm	Total Labor Needs[2]	Total Potential Labor Supply[2]	Degree of Labor Utilization[3]
(Man-months)	(Man-months)		Percentage
52–22	32.1	32.2	100
22–17	19.7	28.1	70
17–13	15.2	22.4	68
13–10	11.6	20.0	58
10–2	7.7	18.0	43
Average of all groups	17.2	24.1	71

[1] Source: *Iowa Sample Census*, January, 1942, survey. The five groups contain equal numbers of farms (79).
[2] Includes labor requirements for all crops and livestock, and potential family and actual hired labor.
[3] Labor needs in percentage of labor supply. Full utilization equals 100.

It is clear that in the 20 per cent of the largest farms with an index of labor use of 100, the available labor supply is effectively utilized. Any decrease in the labor force of these larger farms is bound to be felt as acute labor shortage and to result in less output.[7] About 27 per cent of the labor supply in this group is furnished by hired help.

The smaller the farm size, however, the more slack in the use of labor appears. In the two smallest groups, all crops and

[7] On the other hand, there is still room for some output expansion on many of the larger farms through more labor-saving devices, improved production techniques, and greater use of family labor formerly not employed in farmwork.

livestock require only about half of the available labor force of the farm. Even if we cannot expect that these hidden labor reserves could be fully exhausted by rapid expansion of livestock production in 1943 and 1944, they certainly could be drawn upon a good deal in our efforts to increase hog, egg, and dairy production.[8]

How Can Under-employed Manpower Be Mobilized?

In order to quickly achieve a fuller use of this hidden labor reserve, measures are needed to bring to these farmers additional feed, livestock, and certain equipment, and to advise them how to adjust their production methods and working habits for increasing output. Great Britain is reported to have achieved remarkable results by such measures. But so have we in this country, as will be seen presently.

It is important to look at such measures squarely as part of a manpower program in agriculture. By putting additional livestock facilities on farms with hidden labor reserves, the total effective supply of manpower is increased and put to more efficient use. If this under-used manpower could be supplemented with proper equipment and production techniques for efficient livestock expansion—and there is no reason why this could not be accomplished—labor would soon cease to appear as the limiting factor and feed would set the ceiling for the output.

More direct and specific inducement for output expansion than favorable prices will be needed. Business-as-usual will not do it. On the one hand we don't know where to find the storage space for the hundreds of million bushels of wheat,

[8] From our data we cannot tell how much of the apparent excess of labor supply over requirements is due to inefficiency in labor use, and how much is due to unused or idle labor. Despite the fact that the largest farms show "full" labor use, there is some "unused" family labor on these farms; while the workers actually employed are using their labor with great efficiency. On the smaller farms, the low degree of labor utilization is due mainly to (a) inefficiency as a result of capital deficiency, (b) unused man-months of labor, and (c) work off the farm.

on the other we let millions of farmers go on feeding a few pigs and hens on the little grain they harvest from their small fields. There are ample credit funds in the banks, yes, but we are doing almost nothing to help the typical farmer on a family-sized farm get access and make use of this credit, and to reduce risk, red tape, and collateral requirements involved in securing production loans. So pigs remain unborn and eggs unhatched, and manpower goes to waste.

It is often said that these farmers on small farms with underused labor are inferior managers and would fail to make efficient use of any additional capital which might be furnished them. This contention is based upon the false notion that the managerial ability of a farmer is fixed and unchangeable, like the color of his eyes, and that he always and under all circumstances applies his ability to the limit. The experiences of many now prosperous farmers who at some stage of their life labored under great handicaps of capital deficiency and lack of opportunity, the observations of psychologists and educators, the records of hundreds of thousands of borrowers from the FSA—all bear irrefutable testimony against this notion. The individual's abilities for the various functions he may be called upon to perform are malleable within wide ranges and are strongly influenced by circumstances, customs, and attitudes, by the presence or absence of specific incentives to do specific things. In wartime, environmental conditions can be radically changed, and specific incentives can be provided quickly and forcefully. There is ample evidence that a large proportion of farmers can be expected to respond to financial and managerial assistance in expanding livestock production. Let us look at some of this evidence.

Table 5 presents several typical examples of production increases obtained through small supervised loans for production purposes *without any additions to the manpower supply*

on FSA borrower farms as compared with production on all farms. By eliminating the effect of price changes on gross income, income figures can be made to measure changes in the physical volume of farm output between years. Increases of 40 to 100 per cent in annual farm production over a short period of one to three years with the same labor supply have been recorded, which is possible only if there exists a large reservoir of untapped labor, and if farmers are capable of putting it to more efficient use. A detailed examination of these FSA records reveals that the greater part of the output increases come from livestock enterprises.

TABLE 5

PRODUCTION INCREASES ON FSA BORROWER FARMS, COMPARED WITH ALL FARMS

United States:	
Increase in farm production from 1936–39 to 1940:	
All farms	+8 per cent
FSA borrowers	+43 per cent
Great Lake States:	
Increase in farm production from 1940 to 1941:	
All farms	+9 per cent
FSA borrowers	+123 per cent
Union County, Iowa:	
Increase in livestock products for sale, from 1938 to 1940 on FSA borrower farms:	
Meat animals	+55 per cent
Dairy products	+28 per cent
Poultry and Eggs	+21 per cent

It should be noted that the main objective of the FSA program before the war was not to get the quickest possible increase in production on these farms, but to rehabilitate the impoverished farmers and their families, and to gradually build their farm business over a five-year period up to a point where they can become self-supporting. Hence, it is entirely reasonable to expect even greater increases in production if similar amounts of supervised credit were applied directly to increase certain food products like hogs, eggs, and

dairy products. This policy should be extended to farmers not quite so hard up and handicapped by lack of land and equipment as the typical FSA borrowers used to be. Recently the loan policies of the FSA have been revised in this direction. The FSA is now serving 500,000 farmers with loans and management advice and is assisting them to make their greatest possible contribution to food production.

Conclusion: There are at least 2 to 2.5 million farms where the available year-round labor supply in 1943 would permit substantial increases in livestock production, and where accessibility to markets and the farmer's ability are sufficiently good to justify the furnishing of feed and equipment, together with some technical advice on how to use them for efficient output expansion. It is quite possible that such direct production inducements might be needed merely to achieve the 1943 national goal in dairy production, and it is certain that by such measures the goals for hogs, poultry, and egg production could be surpassed by a substantial amount, probably by 15 to 20 per cent. Even if it should be too late to influence 1943 production markedly, we shall need the food as badly in 1944, if not worse.

Seasonal Labor Needs

Regional variations in the degree of seasonality of labor requirements are shown in Table 6. The Corn Belt ranks lowest, with a peak employment of only 17 per cent over January employment; the Pacific States rank highest with a peak employment nearly twice the January level. There are also great variations in the dependence upon hired labor to meet peak needs. Again, the Corn Belt ranks lowest, the Pacific region highest. In the Eastern and Delta cotton areas, the bulk of seasonal labor is furnished by the family. It is clear that the fruit and vegetable areas in the Pacific States and the small grain areas in the Great Plains are most urgently

pressed for hired seasonal help during the harvest period, with regard to both timeliness and quantity of work.

TABLE 6

SEASONALITY OF LABOR REQUIREMENTS, BY MAJOR FARMING REGIONS, 1941[1]

Type of Farming Area	Total Farm Employment Jan. 1, 1941 (lowest month) (thousands)	Percentage Increase in Farm Employment at Peak Season Over January Employment		
		All Seasonal Labor	Family Labor	Hired Labor
		%	%	%
Corn area	1,118	17	4	13
Northern dairy area	1,405	32	14	18
Small grain area	632	48	18	30
Western cotton area	903	46	23	23
Delta cotton area	898	68	53	15
Eastern cotton area	841	80	60	20
Pacific area	401	94	20	74

[1] Source: *Farm Labor Report*, BAE, Sept., 1941.

Rise in Farm and Factory Wages

Farm and factory wage rates are not directly comparable, because the typical year-round hired man on the farm receives housing and a good part of his food in addition to his cash wage, while the factory worker receives his total wage in cash out of which he must pay all his living expenses. There are several other factors which make the comparison difficult. To roughly appraise what has happened to the position of farm wages relative to factory wages in recent years, it is helpful to go back to the nearest year when we had fairly full employment throughout the economy and, hence, the farm workers may have had the choice between working on the farm or in the factory. To the extent to which they actually had that choice, it could be inferred that the farm wage meant about as much to the farm hand as the factory wage he could have earned. That nearest year was 1929.

TABLE 7

CHANGES IN MONTHLY WAGE RATES ON FARMS AND IN FACTORIES, UNITED STATES, 1929 TO OCTOBER, 1942

	Farm Wages[1] per Month, With Board	Factory[2] Earnings, per Month	Index of Monthly Earnings		
			Farm		Factory
			1929 =100	1940 =100	1940 =100
1929	$41	$104	100	146	100
1940	28	104	68	100	100
1941	33	120	80	118	115
1942	44	152	107	157	146
1940					
Jan.	25	104	61	89	100
July	29	100	71	104	96
1941					
Jan.	27	112	66	96	108
July	36	124	88	129	119
1942					
Jan.	37	140	90	132	135
July	47	156	115	164	150
Oct.	51	164	124	182	158

[1] *Farm Labor Reports*, BAE.
[2] Average weekly earnings in manufacturing times four. *Monthly Labor Review*.

Table 7 shows that in 1929, $41 per month with board on the farm corresponded with $104 per month in the factory. In 1940, the monthly factory wage was again $104; but the farm wage was only $28. Throughout the depressed thirties the farm worker had little chance of finding a job in the city, so he worked on farms for whatever he could get. Since the Spring of 1941, both farm and factory wages began to rise sharply, and farm wages climbed more rapidly than factory wages. But it took farm wages a whole year to merely regain their 1929 level, while factory wages started to rise from that level in 1940. This means that although farm wages rose 82 per cent from July, 1940, to October, 1942, as compared to a

rise in factory wages of only 58 per cent, farm wages were still 22 per cent below "par" with factory wages on the basis of their 1929 relationship. On that basis, an average factory wage of $164 per month would correspond with a farm wage of $65 (with board).

Farm Wages and Farm Income

Do the facts substantiate the claim made by spokesmen of some farm organizations that farmers cannot afford to pay higher wages? Taking farmers as a whole, the facts clearly disprove that claim and show that farmers can well afford to pay even higher wages to their hired hands—provided, of course, that the workers are reasonably competent and reliable Let us look at Table 8.

TABLE 8
FARM WAGES AND FARM INCOME, UNITED STATES, 1929–42

	Total Cash Wages Paid[1] (mill.$)	Index of Farm Wage Bill (1940 =100)	Total Cash Income[1] (mill.$)	Index of Cash Income (1940 =100)	Net Farm Income[2]	Index of Net Farm Income (1940 =100)	Farm Wage Bill in Percentage of Total Cash Income
1929....	1,284	170	11,296	124	6,741	126	11.4
1940....	751	100	9,120	100	5,386	100	8.2
1941....	893	119	11,830	130	7,591	142	7.5
1942....	1,100	146	16,100	177	11,300	210	6.8

[1] *Farm Income Situation*, BAE.
[2] Net income from agriculture received by persons on farms. *Net Farm Income and Income Parity Summary, 1910–41*, BAE, July, 1942.

The total cash wages paid by farmers to hired workers in 1942 were still 14 per cent below 1929, while cash farm income was 43 per cent above 1929. Since 1940, the farm wage bill has risen 46 per cent as compared to an increase in farmers' gross cash income of 77 per cent and in net farm income of

110 per cent. The proportion of the farmer's cash income which he had to pay out in wages to his hired help has declined sharply, from over 11 per cent in 1929 to less than 7 per cent in 1942. It is obvious that whatever wage increases have occurred so far, they have, on the whole, not eaten into the farmers' profits. Indeed, net farm income has increased substantially more than wage rates or total wage bills. Moreover, the share of wage costs in the total production expenditures of farm operators has decreased from 17 per cent in 1929 to 12 per cent in 1942.

There are, of course, exceptions. In some areas, farm wages have risen much more than in the rest of the country, and competent workers are very hard to get. This holds especially on the West Coast. In some cases, farm prices are held down by ceilings at a level too low to enable farmers to pay current wages, as on certain potato farms in Florida. But these are exceptions, not the rule, and should be handled through special arrangements for local adjustments, not through general over-all policies.

Increase in Farm Wages Varies by Regions

In the Pacific states, farm wages rose most between October, 1941, and October, 1942, largely because the rapidly expanding war industries along the West Coast had to offer high wages in order to attract sufficient workers, and the farmers urgently in need of hired help had to compete with industry for the workers. In the Southeast, however, war industries are few, and in the Northeast not many farmers depend upon hired help; farm wages, therefore, rose relatively little, as is seen in Table 9. The Southeast is the major region in the country where even now farm labor is relatively abundant, and the more workers who could be induced to shift into the northern and western farming regions or into war industries, the better it would be for our war effort.

TABLE 9

INCREASE IN FARM WAGES AND CHANGE IN HIRED WORKERS, BY REGIONS, OCTOBER, 1941–42[1]

Regions	Farm Wage Rates per Month With Board		Percentage Increase Oct., 1942 Over Oct., 1941	Percentage Change in Hired Farm Workers From Oct., 1941 to Oct., 1942
	Oct. 1 1941	Oct. 1, 1942		
United States	$37	$51	38	− 4
Pacific	60	91	52	− 6
West North Central	38	56	47	−10
Mountain	47	68	45	−11
West South Central	25	35	40	−10
Northeast	42	53	26	− 5
Southeast	21	26	24	+ 4

[1] Source: *Farm Labor Reports*, BAE, October, 1942.

It should be mentioned that the wage data in Table 9 do not strictly correspond to the employment data, since many of the hired workers on farms in October are seasonal hands not hired by the month, but by the day or on piece rates. The general regional tendencies, however, are shown rather clearly. They suggest that if farmers in the great middle-western regions want to hold workers on their farms they may have to raise wages further, as the farmers in the Pacific states have done; and that if the Manpower Commission and the United States Department of Agriculture are looking for workers to recruit and transport to places of labor shortage, the Southeast is the area of greatest abundance of farm workers

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