Labor I

11/13/2008

Today's Agenda

1. Labor categories (13.2)
2. Departures from usual supply & demand framework (13.3)
3. Poverty, nutrition, and labor markets (13.4.1)
4. Nutrition, time and casual labor markets (13.4.2)

Last time--

- We studied land rental markets and forms of tenancy
- Land markets may not always achieve efficient outcome due to missing markets
- Rural labor markets do not always work perfectly either

1. Labor categories

- We can broadly distinguish two types of hired labor—casual and permanent
- Laborers hired on casual laborers are hired on some daily arrangement or some pre-specified duration. Usually carry out tasks that are easy to observe like harvesting or weeding
- Laborers hired on permanent/long-term basis more involved with supervisory work or hard-to-observe tasks like application of fertilizer, pesticide, water
- What is the rationale behind this division of tasks?
- But doesn't this conflict with standard supply-and-demand framework? Standard supply-and-demand model may be inappropriate for thinking about long-term relationships

2. Standard Model of Labor Supply and Labor Demand

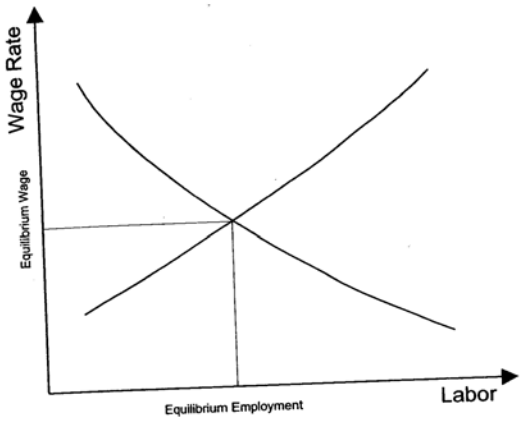

Figure 13.1. Supply of and demand for labor.

- Let's begin with the standard supply-demand theory, and then amend this for particular features of rural markets
- The demand for labor depends on the "going wage" (w). If the going wage falls, the demand for labor by employers rises—downward sloping demand curve

- Supply curve for labor derived doing cost-benefit analysis of working. A higher wage is a higher compensation for labor so not only will each worker want to work more but new workers may also decide to enter labor force—upward sloping supply curve
- Intersection of supply and demand gives as equilibrium wage
- What is wrong with this description of labor markets?
    i. No difference between casual and permanent labor. What happens in tomorrow's labor market has no bearing in what occurs today
    ii. No difference between labor power and laborers. As we know from capacity curve, this distinction is important because not everyone is physically capable of providing same amount of labor
    iii. No difference between working for same employer for all periods or finding new employer every period as long as you are employed. No role for firing
    iv. No such thing as involuntary unemployment. At the equilibrium wage, everyone who wants a job finds one.
    v. No role for seasonality or uncertainty. Say there is fluctuating demand for labor:

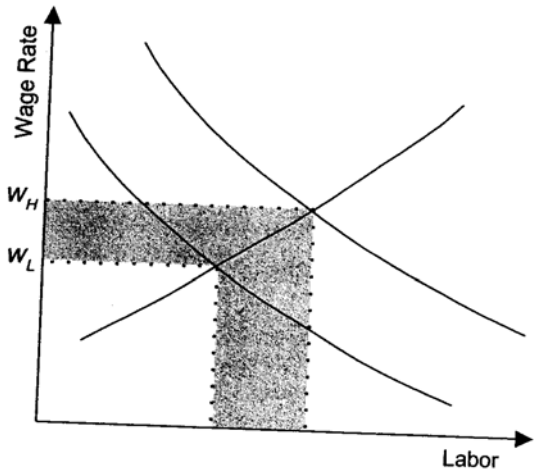

Figure 13.2. Labor market equilibrium under uncertainty.

Evidence from India:

Table 13.1. Unemployment rates, ICRISAT villages, 1975–76.

	Unemployment rates (%)		
	Peak	*Slack*	*Total*
Men	12	39	19
Women	11	50	23

Source: Walker and Ryan [1990].

3. Poverty, nutrition, and labor markets

A. Basic Model

- Recall the capacity curve

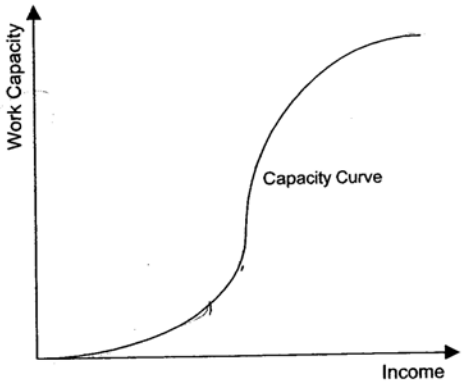

Figure 13.3. The capacity curve.

- Recall piece rate wages

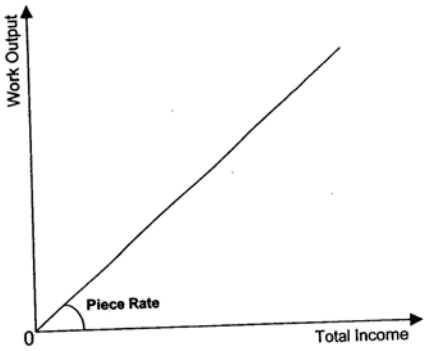

Figure 13.4. A piece rate.

- How much work effort will a person put in given a certain piece rate wage?

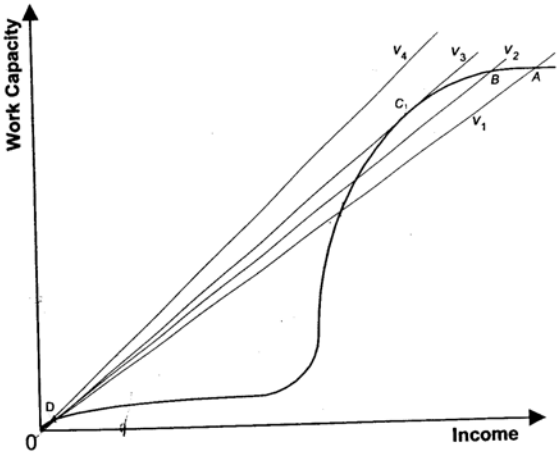

Figure 13.5. Piece rates and work effort.

- What are the individual and aggregate labor supply curves?

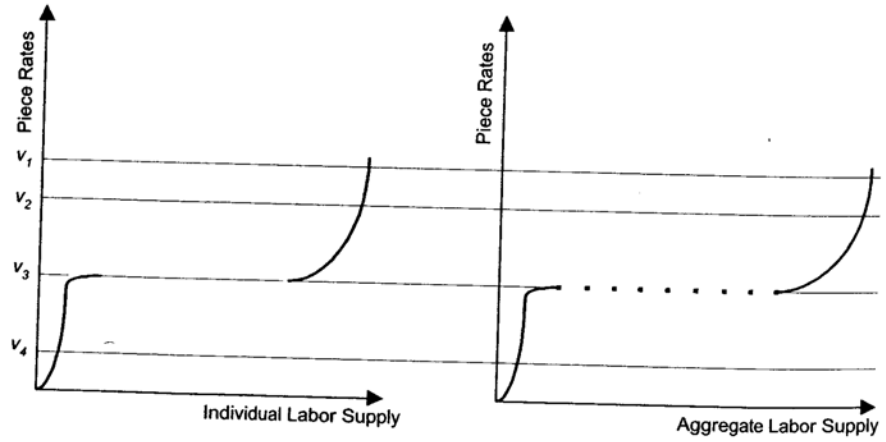

Figure 13.6. Individual and aggregate labor supply.

- To complete the picture, lets add a demand curve and find the equilibrium wage

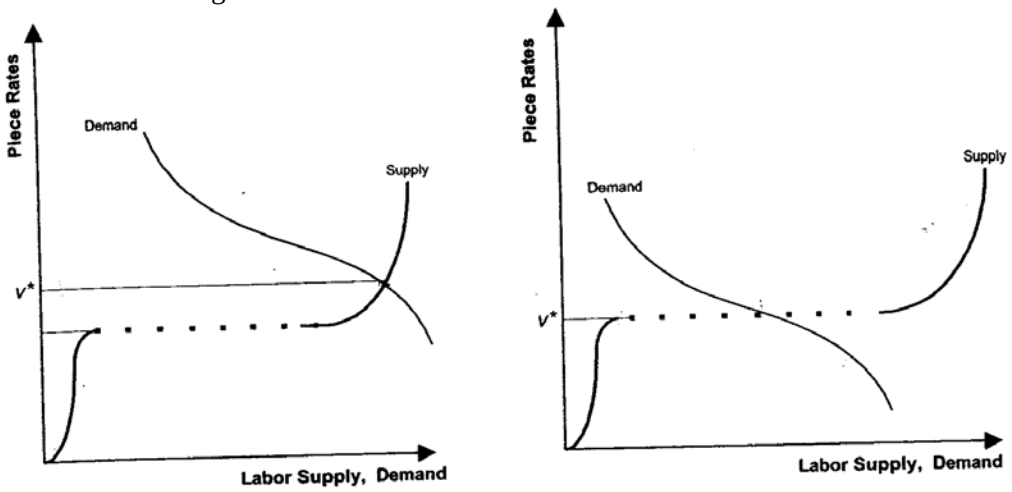

Figure 13.7. "Equilibrium" in the labor market.

- Vicious circle in labor market: lack of market opportunities makes for low wages, and low capacity to work feeds back on the situation by lowering access to labor markets

B. Non-labor assets

- What happens if a person has some other source of non-labor income e.g rental income
- Capacity curve shifts horizontally to left

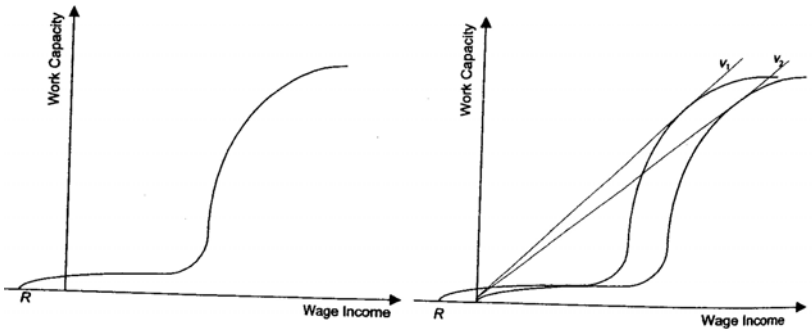

Figure 13.8. How nonlabor assets affect labor income.

C. Market Equilibrium with Asset inequality

- Only one commodity produced (food) using land and labor
- Each person can supply labor based on identical capacity curves
- Land is unequally distributed
- Demand for labor is sum of all the sum of demands for labor from individual households
- "Threshold piece rate" is minimum piece rate at which person can supply labor to market. Represents least amount for which an individual will be able to work on labor market
- Supply of labor: people with greater amounts of non-labor income will be able to supply their labor at a lower threshold piece because rental income takes care of some of their nutritional needs

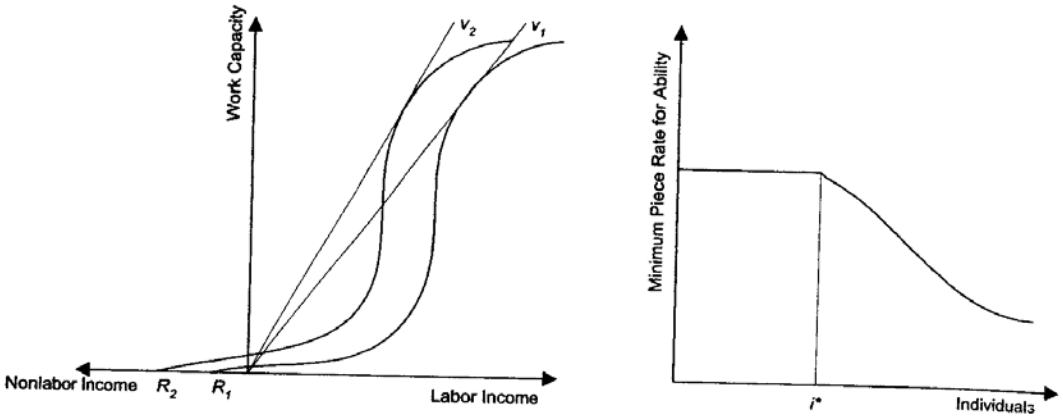

Figure 13.9. The minimum piece rate that determines ability to work.

- But apart from being *able* to work, what about *willingness* to work?
- The minimum wage at which a person is willing to work rises with amount of non-labor income
- Two opposing forces at work, how do they interact?

- Deriving supply curve for labor

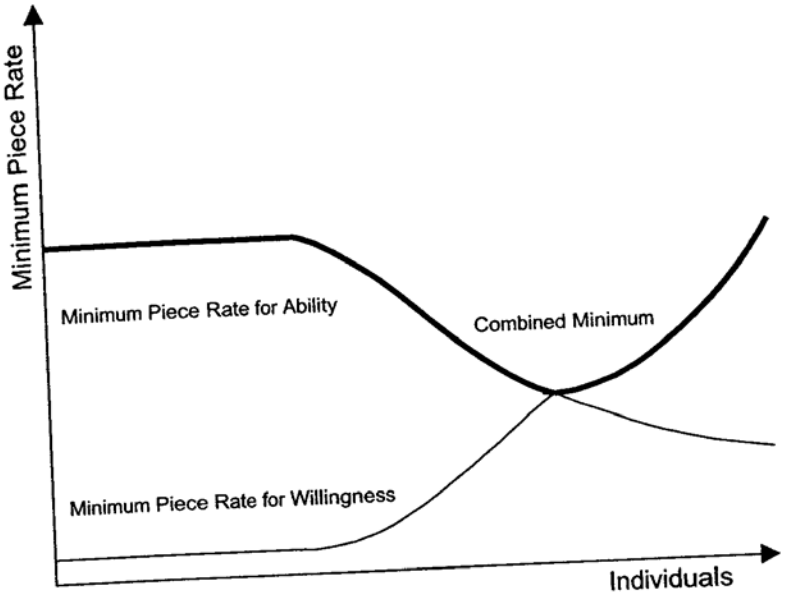

Figure 13.10. Ability and willingness: the combined effect.

- Add demand, market equilibrium

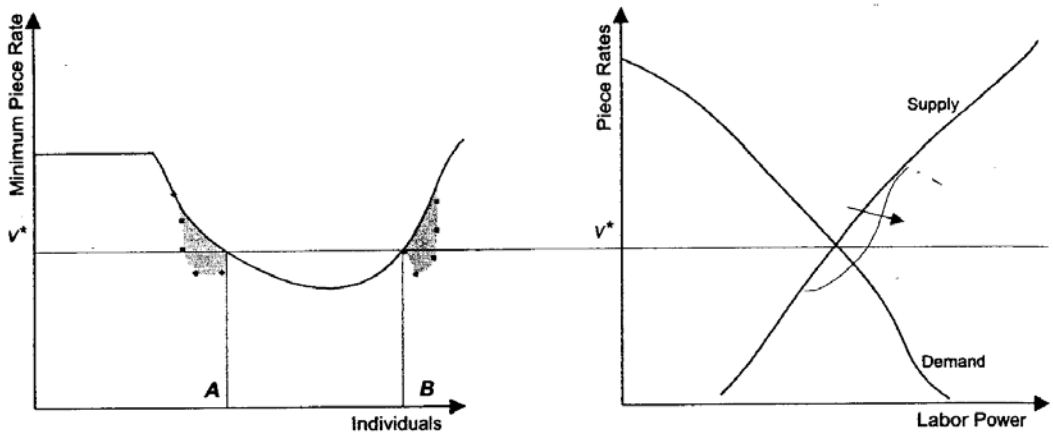

Figure 13.11. Market equilibrium.

- We see involuntary unemployment: people who unable to work because the resulting incomes are not high enough to reproduce the needed work capacity
- What would be the effect of changes in land distribution—like land reform?
- Two immediate effects:
    - Beneficiaries of reform "more able" to work i.e. their minimum piece rate has come down
    - Losers of land become more willing to work so their minimum piece rare has gone down as well

- Labor supply increases, total output in economy increases

5. Casual Labor Markets
- Lack of contracts neglects positive externalities e.g. on-the-job-training
- Same argument can be made for nutritional status
- Let's develop model of person-specific investments that have effect over time
- A worker's current nutritional status (and thus ability to carry out sustained work), depends not only on current consumption but history of consumption
- A and B are different curves because they are affected by nutritional history—which is better?

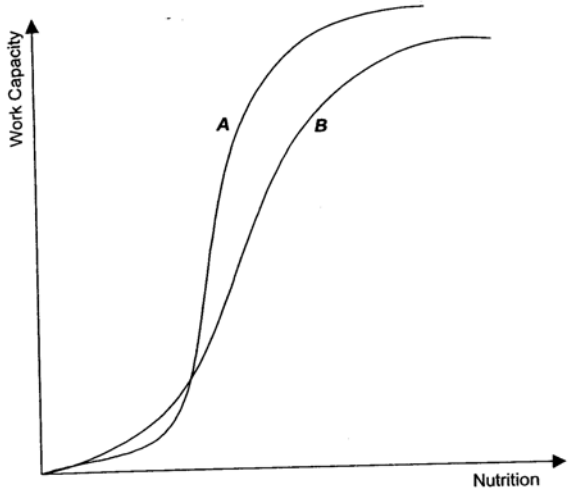

Figure 13.12. Nutritional history and the capacity curve.

- Let's think about features underlying capacity curve
- Two effects "capacity effect" and "resting metabolism effect"
- Employer has incentive to hire person with lower nutritional status
- Casual labor market with limited contracting fails to improve nutritional status of workers and employers also suffer in the process

Next time: Finish Chapter 13