Why land sales may not occur

The value of land in the presence of imperfect credit markets[1] has two components: (i) discounted sum of incomes that the land generates over time from production and (ii) collateral value. So a seller will sell at a price which cannot be lesser than (i) plus (ii). Now look at it from a buyer's side. If the buyer has enough funds to buy *without* borrowing then it's fine.

Suppose he does not.

Now assume that the buyer needs to borrow to actually buy the land and he must mortgage *that* piece of land to obtain the funds. But then, (ii) has lesser value to him since he can only enjoy (ii) once he has repaid the loan (sometime in the future)! So the total amount he is willing to pay is *less* than (i) plus (ii). Hence, there will be no sale.

However, there is one problem with the above argument. Recall, the productivity gain from small plots over large ones. So clearly, a buyer (who is a small farmer) will be expecting to benefit from the gains. Hence, for him (i) is *higher* than what it is for the seller (who is a large landowner). Then (i) plus (ii) for this buyer may still exceed the seller's asking price. If so, then sale might occur, right?

Not quite so, as Mookherjee argues in his 1997 article. Focus on the credit contract between the buyer (who is the borrower) and the lender. The lender will design a contract where the repayments to him will depend upon the borrower's output. In fact, think of the lender as a landlord and the borrower as a tenant where the former "owns" the loan amount. So fixed interest payments arrangement is like fixed-rent tenancy and that is not what is chosen by a landlord and tenant typically for several reasons (risk averse tenant, limited liability, etc.). Hence, the credit contract chosen will be inefficient like a tenancy contract is; this will, in turn, affect the borrower's productivity (lower it) on the new land. So the productivity gain argument is ruled out and we are back to a no-sale situation like before.

[1] Imperfect credit markets in the sense that a borrower may not be able to borrow *any* amount he wants at the going interest rate; some sort of credit rationing exists.