| Table 1: Cal | alculated  | percentage    | changes in   | consumers' | and | producers' | income | due to |
|--------------|------------|---------------|--------------|------------|-----|------------|--------|--------|
| technology j | progress i | in cassava pı | roduction in | Nigeria.   |     |            |        |        |

|                          | k=0.31 | n=0.53 | b=0.55 |
|--------------------------|--------|--------|--------|
| Changes in               | t=0.30 | t=0.50 | t=0.90 |
| Price                    | -28.70 | -28.70 | -28.70 |
| Quantity                 | 15.21  | 15.21  | 15.21  |
| Consumers' surplus       | 6.60   | 14.35  | 25.83  |
| Producers' Cash revenue  | 9.50   | 0.86   | -10.62 |
| Production Cost          | -4.79  | -4.79  | -4.79  |
| Productions' cash income |        |        |        |
| Producers' surplus)      | 13.84  | 5.65   | -5.83  |

Percentage Changes with the specified Parameters

| Table 2: Calculated differential impact of techn | ology progress in cassava production on |
|--------------------------------------------------|-----------------------------------------|
| small and large farmers in Nigeria               |                                         |

|               | Parame         | Parameters specified |     |        | Percentage changes in         |       |  |  |
|---------------|----------------|----------------------|-----|--------|-------------------------------|-------|--|--|
| Income        |                |                      |     |        |                               |       |  |  |
|               | k=.31          | k=.31 n=0.53         |     | Cash   | Cash Production Ca<br>revenue |       |  |  |
|               | t <sub>i</sub> | bi                   | ki  |        |                               |       |  |  |
| Cash 1        |                |                      |     |        |                               |       |  |  |
| Small farmers | 0.50           | .55                  | .31 | 0.86   | -4.79                         | 5.65  |  |  |
| Large farmers | 0.95           | .55                  | .31 | -12.10 | -4.79                         | -7.31 |  |  |
| Case 2        |                |                      |     |        |                               |       |  |  |
| Small farmers | 0.50           | .45                  | .31 | 2.95   | -3.30                         | 6.25  |  |  |
| Large farmers | 0.95           | .65                  | .31 | -14.93 | -6.44                         | -8.49 |  |  |
| Case 3        |                |                      |     |        |                               |       |  |  |
| Small farmers | 0.50           | .55                  | .20 | -10.14 | -8.69                         | -1.45 |  |  |
| Large farmers | 0.95           | .55                  | .40 | -3.10  | -1.59                         | -1.58 |  |  |
| Case 4        |                |                      |     |        |                               |       |  |  |
| Small farmers | 0.50           | .45                  | .20 | -7.27  | -6.71                         | -0.56 |  |  |
| Large farmers | 0.95           | .65                  | .40 | -5.93  | -2.90                         | -3.03 |  |  |

| Income Classes | Proportion of household<br>expenditure on cassava and<br>cassava products | Percentage increase in real income |
|----------------|---------------------------------------------------------------------------|------------------------------------|
| < 2000         | 0.30                                                                      | 8.61                               |
| 20001-4000     | 0.12                                                                      | 3.44                               |
| 4001-6000      | 0.08                                                                      | 2.30                               |
| 6001-8000      | 0.08                                                                      | 2.30                               |
| 8001-10000     | 0.70                                                                      | 2.01                               |
| >10000         | 0.02                                                                      | 0.57                               |

Table 3: Differential impact of technology change on the real income of cassava consuming households in Nigeria

Source: Computed using data from rural households survey, 1994.