

***Economic Outcomes of Rural Microenterprise Development in the  
2007 Farm Bill: An Analysis of the  
Rural Entrepreneur and Microenterprise Assistance Program***

***Jon M. Bailey***

***Kim Preston***

***Center for Rural Affairs***

***Rural Research and Analysis Program***

***August 2007***

## Introduction and Purpose

The Farm, Nutrition, and Bioenergy Act of 2007 – H.R. 2419, the U.S. House of Representatives version of the 2007 Farm Bill – was adopted on July 27, 2007. Included in H.R. 2419 is the *Rural Entrepreneur and Microenterprise Assistance Program* (REMAP), a \$20 million annual grant and loan program with the express purpose to provide technical assistance and capital to new or expanding small businesses in rural areas.<sup>1</sup> It is anticipated that the U.S. Senate version of the 2007 Farm Bill will contain a similar provision.

This report, employing previously published research and data, examines the potential economic outcomes of REMAP, including the potential job creation and effects on income and assets for rural people and rural households should REMAP be part of the final 2007 Farm Bill adopted by Congress and signed into law and subsequently implemented.

## Methodology, Data Sources and Assumptions

This report is based on assumptions that the final version of REMAP will: 1) be funded at the level of \$20 million annually, and 2) that REMAP funding will be allocated as included in S. 566 (the *Rural Entrepreneur and Microenterprise Assistance Act*, the model for REMAP), 60 percent for a technical assistance grant provision (\$12 million) and 40 percent for a microloan provision (\$8 million, with no more than \$3 million for direct loans and the remainder for grants to lending organizations to provide technical assistance service to borrowers and potential borrowers).

This report employs a methodology for economic outcomes of microenterprise development programs created by the MicroTest performance measurement system of the Microenterprise Fund for Innovation, Effectiveness, Learning and Dissemination (FIELD), a program of the Aspen Institute.<sup>2</sup> The methodology employed in this report is outlined in *Opening Opportunities*,

*Building Ownership: Fulfilling the Promise of Microenterprise in the United States*, a 2005 report of the Aspen Institute.<sup>3</sup>

The methodology used in this report is a variation of the methodology developed by FIELD through its MicroTest data.<sup>4</sup> That methodology determines costs associated with producing a “business outcome,” or the act of an entrepreneur being in business at the time data are collected through the MicroTest surveying system. From the data a “cost per business outcome” figure is determined, along with the change in draw taken by the owners of businesses surveyed, the change in employment by businesses surveyed over time, and the wages paid attributable to any change in employment. These figures are used to determine the economic effectiveness of microenterprise development.<sup>5</sup> The FIELD methodology also allows for a determination of employment per microenterprise business.

The FIELD methodology allows for a determination if an investment in microenterprise development is effective by comparing the cost per business outcome to the total change (represented by changes in owners draw, employment and wages over a specific time) for an average business. With a few modifications to the methodology, this report examines not the economic consequences of microenterprise development investment through the lens of a typical business, but rather through potential aggregate outcomes of a \$20 million annual investment in a rural microenterprise program.

Other sources provide data on factors such as the cost per training or average loan size. Since REMAP funding may be allocated to those specific uses, it is tempting to use those sources and these data in this report. For the purposes of rural economic development, training, technical assistance and loans are simply means to an end.

---

<sup>3</sup> Edgcomb, E. and Klein, J. 2005. *Opening Opportunities, Building Ownership: Fulfilling the Promise of Microenterprise in the United States*. Washington, DC: Aspen Institute.

<sup>4</sup> MicroTest data and outcomes are developed through data collected by microenterprise development organizations throughout the United States and provided to the FIELD program of the Aspen Institute. The Rural Enterprise Assistance Project of the Center for Rural Affairs is one of those programs that collects and submits it to FIELD through the MicroTest system.

<sup>5</sup> See, Edgcomb and Klein at 47 for a through explanation of this methodology and its uses.

---

<sup>1</sup> See, Section 6013, H.R. 2419.

<sup>2</sup> For additional information on MicroTest and FIELD, see the following website: [http://www.aspeninstitute.org/site/c.huLWJeMRKpH/b.612033/k.47E4/Economic\\_Opportunities\\_Program.htm](http://www.aspeninstitute.org/site/c.huLWJeMRKpH/b.612033/k.47E4/Economic_Opportunities_Program.htm)

The end of rural economic development as expressed in the Farm Bill through programs like REMAP should be the creation and development of sustainable local businesses that generate jobs, economic activity and economic opportunities in rural communities. Therefore, we have chosen to employ a variation of the “business outcome” methodology developed by the Aspen Institute through the MicroTest system.

The analysis in this report is based on the following data and assumptions:

- \$20 million annual funding for the *Rural Entrepreneur and Microenterprise Assistance Program*.
- A “Cost of Business Outcomes” figure of \$7,376 to \$7,956 per business (this is a figure adjusting the FIELD finding to 2006 dollars).<sup>6</sup>
- REMAP funding of \$20 million at that “cost of business outcomes” figure would create or expand 2,514 to 2,711 rural microenterprise businesses.<sup>7</sup>
- The change in owner’s draw per business is \$5,390 (the FIELD finding adjusted to 2006 dollars).<sup>8</sup>
- The average business employs 0.92 full-time equivalent employees.<sup>9</sup>
- Two assumptions are made regarding the average wage per full-time equivalent employee. One is based on payment of the minimum wage similar to the methodology used by FIELD. Using a minimum wage calculation results in an average annual wage per full-time equivalent employee of \$10,764. This is obtained by assuming the current minimum wage is wage level (\$5.85 per hour) for 40 hours per week for 50 weeks per year. This is likely a conservative estimate based on the use of the minimum wage and the

maximum weekly work hours before overtime is applicable.<sup>10</sup>

In our experience we know that many microbusinesses pay more than the minimum wage. Therefore, we know that a methodology using the minimum wage as representative of an average wage understates the economic benefit of wages paid. U.S. Census Bureau business payroll data for 2004 finds the annual average wage for business that meet the REMAP definition of “microenterprise” to be \$31,618.<sup>11</sup> However, rural incomes and rural wages are general lower than the national averages. Since REMAP is designed solely for rural businesses, we must also figure a “rural discount” to take into account this fact. The most recent data (2005) indicates that the average wage per job in nonmetropolitan areas of the United States is 69 percent of the average wage per job in metropolitan areas.<sup>12</sup> While nonmetropolitan is not a perfect definition of “rural,” we choose to use it for this calculation. Thus, this report uses \$21,816 as an alternative figure for the average annual wage per full-time equivalent employee.

In order to provide a range of potential jobs created by REMAP and a range of total economic outcomes, this report uses two other measures of job creation by microenterprise businesses. The Association of Enterprise Opportunity (AEO) estimates that microenterprise businesses have an average employment rate of 1.7 employees per business.<sup>13</sup> The Aspen Institute found that numerous studies of low-income microenterprises “generally find that each business generates about 1.5 jobs.”<sup>14</sup> This report considers both these employment figures as well as the FIELD figure in conjunction with the other data and assumptions outlined above. In Table 1 on page 5 the employment figures are identified as FIELD (0.92 jobs per business), AEO (1.7 jobs per business) and Aspen (1.5 jobs per business).

This report also examines the potential effects of

<sup>6</sup> Edgcomb and Klein at 49-50; the data in this report is based on program costs reported to MicroTest for Fiscal Years 2000-02. We have assumed data is in 2002 dollars and adjusted accordingly to 2006 dollars.

<sup>7</sup> As defined in REMAP, a “microenterprise” is a sole proprietorship or a business entity with not more than 10 full-time equivalent employees.

<sup>8</sup> Edgcomb and Klein at 49-50.

<sup>9</sup> *Id.*

<sup>10</sup> *Id.* The formula is expressed as:  $(\$5.85 \times 40 \times 50) \times 0.92$

<sup>11</sup> United State Census Bureau. 2005. *Statistics of U.S. Businesses*.

<sup>12</sup> U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System, December 2006.

<sup>13</sup> <http://www.microenterpriseworks.org/> accessed August 9, 2007.

<sup>14</sup> Edgcomb and Klein at 62.

REMAP on income and asset levels of microentrepreneurs. Much of the literature and research on this issue concerns segments of the population that may or may not be served by a national rural microenterprise program (e.g., welfare recipients). However, it has been found that participation in a microenterprise program increased household income by an average of \$6,116 over a two year period after participation began, or an average of \$3,058 per year.<sup>15</sup> While the owner's draw discussed above may be a proxy for income in analyzing the potential economic outcomes of REMAP, this finding also showed that an increase in owner's draw (an average of \$1,953.50 per year in the survey in question) represented only about 64 percent of the increase in household income.<sup>16</sup> In other words, there appears to be a larger increase in household income associated with participation in and ownership of a microenterprise business beyond funds drawn from the business by the owner.

For purposes of this report each of the 2,514 to 2,711 rural microenterprise businesses created or expanded with assistance from REMAP will be considered a household. For a comparable ratio found between the change in owners draw and the increase in household income discussed above, a one year increase in household income of \$8,450 will be imputed to each of the 2,514 to 2,711 rural microenterprise businesses (\$1,953.50: \$3,058 = \$5,390: \$8,450).

In surveys of low-income microentrepreneurs, the Aspen Institute also found that household assets of microentrepreneurs increased over time, with most of the asset growth in homeownership. A 1999 study (using 1997 data) found that household assets grew by \$13,140 over five years, or \$16,508 over five years adjusted to 2006 dollars (an average of \$3,302 per year).<sup>17</sup> A 2003 study found that household asset levels grew both for those who were solely self-employed and "patchers," those with both wage and self-employment income, though gains were stronger for those with self-employment income only.<sup>18</sup>

<sup>15</sup> Aspen Institute. 2005. *Monitoring Client Outcomes: A report from MicroTest's 2004 Data Collection*. Washington, DC: Aspen Institute.

<sup>16</sup> *Id.* at 6.

<sup>17</sup> Edgcomb and Klein at 70.

<sup>18</sup> Klein, J., Alisultanov, I., Blair, A. 2003. *Microenterprise as a Welfare to Work Strategy: Two-Year Findings*. Washington, DC: FIELD (Aspen Institute).

Patching income is a major phenomenon in rural areas, but it is difficult and beyond the scope of this report to determine how many of those businesses assisted by REMAP would be solely self-employed and how many would be "patchers." For the purposes of this report, therefore, we will impute a one year household asset increase of \$3,302 for each of the 2,514 to 2,711 rural microenterprise businesses created or expanded with assistance from REMAP.

## Key Findings

- Adoption and implementation of a \$20 million annual *Rural Entrepreneur and Microenterprise Assistance Program* would result in 2,514 to 2,711 rural microenterprise businesses created or expanded with assistance from the program in its first year.
- The *Rural Entrepreneur and Microenterprise Assistance Program* would potentially create from 2,300 to 4,600 jobs in rural areas in its first year.
- The *Rural Entrepreneur and Microenterprise Assistance Program* and resulting participation in microenterprise development programs would potentially create from \$21.2 million to \$22.9 million in additional income in rural households in its first year.
- The *Rural Entrepreneur and Microenterprise Assistance Program* and resulting participation in microenterprise development programs would potentially create over \$8 million in rural household asset growth in its first year.
- An investment of \$20 million in the *Rural Entrepreneur and Microenterprise Assistance Program* would result in potential economic outcomes in rural communities of \$54 million to \$132 million in its first year.
- Over five years the \$20 million first year investment in the *Rural Entrepreneur and Microenterprise Assistance Program* would result in potential economic outcomes in rural communities of \$216 million to \$526 million.

## Analysis

Table 1 outlines three scenarios for the total potential economic outcomes of a full implementation of REMAP. Each scenario employs the methodology, assumptions and data outlined herein, with each scenario varying only according to the employment figure per microenterprise business (and resulting wages paid) as summarized in the discussion herein of the different employment measures.

Table 1 shows that the potential economic effects of a one year \$20 million investment in REMAP are significant. At worst and based on the lowest job creation and wage scenario, REMAP would have \$54.4 million worth of direct economic outcomes in rural communities across the nation, a 2.7:1 return on one year of funding. At best, REMAP would result in \$132.4 million worth of direct economic outcomes in rural communities, over a 6:1 return.

	FIELD	AEO	Aspen
<i>Jobs Created</i>	2,313 – 2,494	4,274 – 4,609	3,771 – 4,006
<i>Wages Paid –Low</i>	\$24,897,1332 – 26,845,416	\$46,005,336 – 49,611,276	\$40,591,044 – 43,120,584
<i>Wages Paid – High</i>	\$50,460,408 – 54,409,104	\$93,241,584 – 100,549,944	\$82,268,136 – 87,394,896
<i>Total Owner Income Effect (\$8,450/bus.)</i>	\$21,243,300 – 22,907,950	\$21,243,300 – 22,907,950	\$21,243,300 – 22,907,950
<i>Total Owner Asset Growth Effect (\$3,302/bus.)</i>	\$8,301,228 – 8,951,722	\$8,301,228 – 8,951,722	\$8,301,228 – 8,951,722
<b>Total Economic Outcomes</b>			
<i>Low</i>	\$54,441,660 – 58,705,088	\$75,549,864 – 81,470,948	\$70,135,572 – 74,980,256
<i>High</i>	\$80,004,936 – 86,268,776	\$122,786,112 – 132,409,616	\$111,812,664 – 119,254,568

**Table 1. Rural Entrepreneur and Microenterprise Assistance Program Economic Outcome Scenarios**

Some of the caveats presented in the Aspen Institute publication *Opening Opportunities, Building Ownership: Fulfilling the Promise of Microenterprise in the United States* should be noted here. Neither the research documented there nor the figures presented in this report are the result of control group research; as a result, “changes in income earned and employment generated cannot be ascribed causally” to any microenterprise services that may be received as a result of REMAP.<sup>19</sup> In addition, as with those clients represented in the MicroTest data, anyone receiving microenterprise services as a result of REMAP funding will have varying degrees of business experience and will receive varying degrees of service.<sup>20</sup>

However, as the Aspen Institute report states, even assuming only half the total economic outcomes outlined for each scenario in Table 1 are due to services obtained as a result of

REMAP leads to the conclusion that REMAP will have significant positive effects for the rural economy, and represents a potential positive return on a public investment.

It is also important to note the values in the scenarios in Table 1 capture only one year’s estimated outcomes and are based on one year of REMAP funding. Additional economic benefits – such as stronger income and asset growth – will surely materialize after businesses mature and reap the benefits of training and assistance from microenterprise development organizations receiving REMAP funding. More rural businesses – who employ more rural residents – will also develop in subsequent years of REMAP funding. And wage, employment, income and asset levels will likely grow as rural microenterprise development organizations build capacity and provide assistance and service to more rural businesses and entrepreneurs in later years of REMAP implementation.

REMAP, of course, is not a one year program and

<sup>19</sup> Edgcomb and Klein at 50.

<sup>20</sup> *Id.*

the businesses created, expanded or assisted pursuant to its funding will exist for varying lengths of time with economic outcomes over time. Some businesses created, expanded or assisted through REMAP will also, unfortunately, terminate at some point. A five-year longitudinal study of microenterprises found that 57 percent of businesses survived after five years.<sup>21</sup> Coincidentally, five years is also the proposed duration of the Farm Bill currently being developed in Congress. Therefore, this report also estimates the economic outcomes of the initial investment in REMAP over a five year period. In order to do so, we assume a 10 percent annual attrition in businesses created or expanded as a result of REMAP with 57 percent of the businesses existing in the fifth year. The total economic outcomes presented in Table 1 are multiplied by the percentage of businesses assumed to exist at the end of each year (for example, 90 percent of business are assumed to exist in Year 2; 90 percent of total economic outcomes in Table 1 are attributed to Year 2).

Table 2 outlines the total estimated five year economic outcomes of REMAP for each of the three scenarios outlined above. The lowest scenario results in over \$216 million in outcomes, more than a 10:1 return; the highest scenario results in nearly \$526 million in outcomes, more than a 26:1 return.

Table 2 shows significant positive returns on REMAP funding even assuming nearly half the businesses from Year 1 do not exist by Year 5. The data in Table 2 is also likely understated to some degree because it assumes static wages, employment, owner income and owner assets over five years. As surviving businesses grow and mature all these factors are likely to increase or grow, thus enhancing economic outcomes. This report also does not consider additional businesses that may be created or expanded in Years 2 through 5 of the program. While REMAP funding will continue assisting businesses created in the first year, each of the next four years will witness additional businesses created and expanded as a result of the program, further multiplying economic outcomes.

	FIELD	AEO	Aspen
5-Year Low	\$216,133,390 - 233,059,199	\$299,932,960 – 323,439,664	\$278,438,221 – 297,671,616
5-Year High	\$317,619,596 – 342,487,041	\$487,460,865 – 525,666,176	\$443,896,276 – 473,440,635

**Table 2. Five-Year Total Economic Outcomes of the Rural Entrepreneur and Microenterprise Assistance Program**

Finally, it is important to note, as articulated in the Aspen Institute report and other research, that the estimates of the Table 1 scenarios do not “include the full range of financial benefits” that businesses may produce in local communities.<sup>22</sup> Reductions in public benefits, taxes paid, the local multiplier effect of enhanced income and asset levels, enhanced income and asset levels for employees, the local multiplier effects of employment and wages paid by businesses and the civic and economic effects locally-owned small businesses bring to communities are examples of other benefits that would result from rural businesses created and assisted as a result of REMAP.

Research has also shown that local small business creation has a multiplier effect in

creating other jobs in the local economy. A study of the Northeast Entrepreneur Fund, a microenterprise development organization in northeast Minnesota and northwest Wisconsin (much of which is rural), found that for “every job created by a (Northeast Entrepreneur Fund) customer’s firm, an additional 0.9 jobs are created in the local economy.”<sup>23</sup>

## Conclusion

Inclusion of the *Rural Entrepreneur and Microenterprise Assistance Program* in the 2007 Farm Bill, funding of it and subsequent implementation of the program has great potential to spur innovation and job creation in rural communities. While traditional economic

<sup>21</sup> Clark, P. and Kays, A. 1999. *Microenterprise and the Poor*. Washington, DC: Aspen Institute.

<sup>22</sup> *Id.* At 51.

<sup>23</sup> Sevron, L. and Doshma, J. “Microenterprise and the Economic Development Toolkit: A Small Part of the Big Picture.” *Journal of Developmental Entrepreneurship*, 5, no. 3, (December 2000): 183-208.

development models of industrial and business recruitment do not meet the needs of many rural communities, entrepreneurship is a model that better serves rural people and rural places. The Federal Reserve Bank of Kansas City states that, "Rural policymakers, who once followed traditional strategies of recruiting manufacturers that export low-value products, have realized that entrepreneurs can generate new economic value for their communities. Entrepreneurs add jobs, raise incomes, create wealth, improve the quality of life of citizens and help rural communities operate in the global economy."<sup>24</sup>

Asset-building strategies are equally important. Greater income alone cannot lead to economic well-being for individuals and families; assets like homes and business lead to long-term economic and financial stability of households and families. Assets like businesses and houses also bond residents to a place and help to build sustainable communities. A commitment to rural asset-building strategies such as REMAP will lead to stronger individuals, families, and communities.

The changing demographics of rural America are complex and subtle, but their effect on the economic productivity and social fabric of rural communities is not. While rural counties found adjacent to population centers are experiencing increased population through migration, many

rural areas of the country are continuing to feel the consequences of population loss. Census figures from 2004 indicate that 77 percent of farming counties and 62 percent of rural mining counties lost population between 2000 and 2004. Declining population is a factor that significantly influences the economy, quality of life and future of a rural community. Declining population is often evidence of a spiral that begins with a troubled economy, leading to more out migration, few economic opportunities and economic and community institutional consolidation. Entrepreneurship is one strategy with the potential to bring back the young to rural communities that few development strategies have. Surveys of high school students in Nebraska, for example, find that up to 80 percent would like to own their own farm or business.

Entrepreneurship and asset-building are rural development strategies that have the potential to repopulate rural areas, attack the root causes of rural poverty, and address the continuing and growing economic disparity between rural and urban areas of the nation. Initiatives such as the *Rural Entrepreneur and Microenterprise Assistance Program* recognize the importance of entrepreneurship as a rural development strategy and provide the opportunity for rural people and rural communities to leverage the spirit, creativity, and opportunities entrepreneurship creates.

---

<sup>24</sup> Federal Reserve Bank of Kansas City, Center for the Study of Rural America. 2002. "Are High-Growth Entrepreneurs Building the Rural Economy." *The Main Street Economist*, August 2002.

## **Acknowledgements**

This report is part of a series of periodic reports and studies that examine rural development and rural asset-building policy issues. The authors wish to acknowledge the Ford Foundation and Otto Bremer Foundation whose financial support make these reports possible. We are grateful for the trust and support they offer to the Center for Rural Affairs and its research.

## **About the Center for Rural Affairs**

Established in 1973, the Center for Rural Affairs is a private, nonprofit organization with a mission to establish strong rural communities, social and economic justice, environmental stewardship, and genuine opportunity for all while engaging people in decisions that affect the quality of their lives and the future of their communities.

Center for Rural Affairs, P.O. Box 136, Lyons, Nebraska, USA 68038

Published August 2007. The printed report is available at no cost on the Center's website, [www.cfra.org](http://www.cfra.org).