

You develop a solution. Is it any good? This sheet helps you assess the fit of a recommendation. You will:

1. Clarify the target users (audience) for the technology and the problem being addressed
2. Articulate requirements for and benefits of the technology
3. Identify where the technology could be applied and cost implications



1) Target users and their needs

Who are your target users? (Consider gender, their knowledge base, demographics such as age, land size, land tenure, access to credit and market, etc.)	
What problem does your recommendation solve and does it address the main cause of the problem?	
Have your target users widely expressed interest in the problem? (Consider who was asked?)	
What fraction of possible users could realistically adopt and benefit?	

2) Summary description of differences between the new and present practice

	What are the major differences between the “new” and present practice (why might it be more or less acceptable!)
Consider factors like <ul style="list-style-type: none"> • Requirements: e.g., Labor, inputs, credit and resource • Does the practice fit with other activities? • Who is involved to implement? • Effects on the environment 	

Are inputs easily available?	<input type="checkbox"/> Yes	<input type="checkbox"/> Could be an issue
Are inputs readily affordable?	<input type="checkbox"/> Yes	<input type="checkbox"/> Could be an issue
Is more labor or capital required?	<input type="checkbox"/> Yes	<input type="checkbox"/> Could be an issue
Is credit (if needed) readily available and affordable?	<input type="checkbox"/> Yes	<input type="checkbox"/> Could be an issue
Is the technology easy to understand and test?	<input type="checkbox"/> Yes	<input type="checkbox"/> Could be an issue
How much training is required?	<input type="checkbox"/> A little	<input type="checkbox"/> A fair amount <input type="checkbox"/> A lot
Note any fragile parts or maintenance needs?		

3) Solution - Where does it fit?

List any specific environmental conditions needed – e.g., climate, soil type, etc.
List any socio-economic conditions required (e.g., capital, market, infrastructure, culture)

4) Solution - Benefits?

Type of benefit:	Yield change? <input type="checkbox"/> Yes, % _____
	Quality change? <input type="checkbox"/> Yes
	Other (e.g., labor reduction,...) (If labor, are there gender aspects?)
Is there a definite market for additional product or better price for better quality? <input type="checkbox"/> Yes <input type="checkbox"/> Maybe	
Is benefit obvious to other farmers? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Maybe	
How long does it take to recover costs of the technology?	

5) Solution - Risks?

Specify any possible risks
What might limit adoption or testing?

6) Economic analysis - Cost comparison of new and old practices

Requirements	Present practice (\$)	New practice (\$)
Labor (Male/Female)	M F	M F
Inputs required		
Capital requirements		
Operating costs		
Credit costs		
Other		
Total		

For a full economic analysis, see the CIMMYT 1988 work book at:

<http://repository.cimmyt.org/xmlui/bitstream/handle/10883/830/13803.pdf>

7) **Marginal Rate of Return (MRR):** amount of additional revenue that the farmer could earn per each additional dollar that spends on the technology

	New – present (\$)
Marginal return or benefit (amount of revenue per additional item) =	
Marginal cost (cost per additional item produced) =	

Marginal rate of return (MRR) = Net benefit/Marginal cost*100 (%) = _____

Note: 40-50% is often cited as a minimum MRR to attract farmer interest (CIMMYT, 1988).

8) Conclusion

What might limit adoption or testing? _____

What factors might you need to address to ensure success and technology spread?

1. _____
2. _____
3. _____