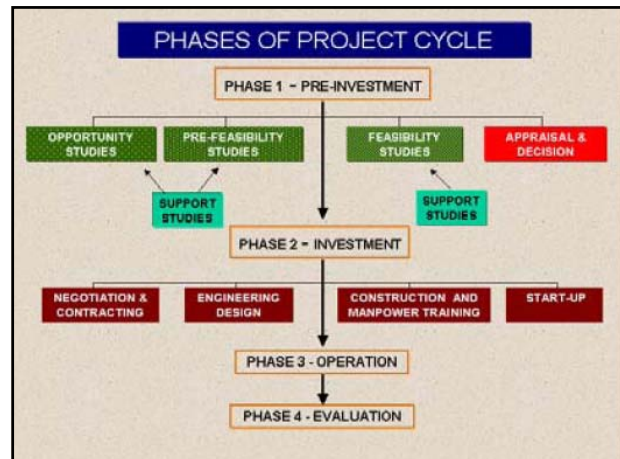


Předinvestiční studie a studie proveditelnosti

- > studie investičních příležitostí;
- > všeobecné studie investičních příležitostí;
- > studie investičních příležitostí specifického projektu;
- > předběžná studie proveditelnosti;
- > studie proveditelnosti;
- > podpurné (funkční) studie.

ESP KRES 10/2006



OPPORTUNITY STUDY

Objectives:

- ❖ REFINEMENT OF BUSINESS IDEA
- ❖ PRELIMINARY EVALUATION OF ALTERNATIVE APPROACHES
- ❖ PRELIMINARY ASSESSMENT OF STRENGTHS AND WEAKNESSES OF CONCEPT

Characteristics:

SKETCHY, BASED MORE ON ROUGH AGGREGATE ESTIMATES THAN ON DETAILED ANALYSIS

PRE-FEASIBILITY STUDY

Objectives:

- ❖ PRELIMINARY PROJECT ASSESSMENT
- ❖ IDENTIFY PROJECT ALTERNATIVES
- ❖ IDENTIFY CRITICAL ASPECTS THAT REQUIRE SPECIAL SUPPORT STUDIES

Characteristics:

INTERMEDIATE LEVEL OF DETAIL BASED PRIMARILY ON SECONDARY DATA

FEASIBILITY STUDY

Objective:

PROVIDE COMMERCIAL, TECHNICAL, FINANCIAL AND ECONOMIC INFORMATION NEEDED FOR INVESTMENT DECISION-MAKING

Characteristics:

- ❖ CLEAR PROJECT CONCEPTS AND CRITERIA
- ❖ COMPREHENSIVE PROJECT DESIGN
- ❖ RELIABLE INFORMATION, OFTEN PRIMARY DATA
- ❖ QUANTIFIED PREDICTION OF PERFORMANCE
- ❖ DETAILED ANALYSIS WITH HIGH CONFIDENCE LEVEL
- ❖ CONSISTENT AND DEFENSIBLE CONCLUSIONS
- ❖ SELECTION CRITERIA

SUPPORT STUDIES

Objective:

PROVIDE DETAILED TECHNICAL ANALYSIS OF CRITICAL DESIGN FEATURES

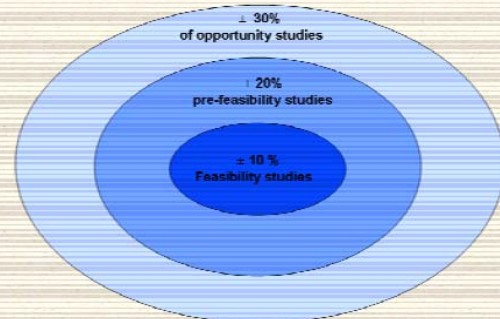
Characteristics:

- ❖ LIMITED SCOPE
- ❖ PERFORMED BY TECHNICAL EXPERTS
- ❖ ANSWERS KEY QUESTIONS
- ❖ DEGREE OF RIGOR COMMENSURATE WITH STAGE OF PROJECT DEVELOPMENT

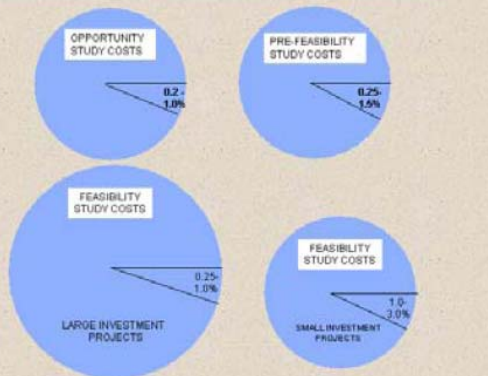
TYPES OF SUPPORT STUDIES

- ❖ MARKETS
- ❖ INPUTS
- ❖ LOCATION
- ❖ TECHNOLOGY
- ❖ EQUIPMENT

TARGET PRECISION IN PRE-INVESTMENT STUDIES



COST RANGE OF PRE-INVESTMENT STUDIES



Studie proveditelnosti

- především u investičních projektů;
- u projektů nad 10 mil. EUR;
- posouzení technické, finanční a socio-ekonomické proveditelnosti záměru;
- výběr mezi jednotlivými variantami záměru;
- srovnání projektů mezi sebou.

ESF KRES 10/2005

Studie proveditelnosti

- úvod a shrnutí;
- analýza trhu a marketingová koncepce;
- technické řešení projektu;
- umístění a lokalita výstavby;
- vliv na ŽP;
- analýza lidských zdrojů;
- harmonogram realizace;
- finanční a ekonomická analýza;
- výrok zpracovatele studie proveditelnosti.

ESF KRES 10/2006

INTERNAL – EXTERNAL MARKET RELATIONS



DEMAND DEFINED

THE TOTAL VOLUME OF A PRODUCT (GOOD OR SERVICE) LIKELY TO BE CONSUMED

- ❖ BY A DEFINED GROUP OF CONSUMERS
- ❖ IN A DEFINED GEOGRAPHICAL AREA
- ❖ DURING A DEFINED TIME PERIOD
- ❖ IN A DEFINED MARKET ENVIRONMENT
- ❖ UNDER A PARTICULAR MARKETING APPROACH

DEMAND TERMINOLOGY

- ❖ APPARENT CONSUMPTION
- ❖ EFFECTIVE DEMAND
- ❖ LATENT DEMAND
- ❖ UNSATISFIED DEMAND
- ❖ POTENTIAL MARKET
- ❖ DEGREE OF MARKET SATURATION

DETERMINANTS OF DEMAND

- ❖ POPULATION
- ❖ MACRO ENVIRONMENT
- ❖ PHYSICAL ENVIRONMENT
- ❖ STATE OF LINKED INDUSTRIES
- ❖ MARKETING STRATEGY
- ❖ COMPETITIVENESS IN MARKET
- ❖ INTERNATIONAL FACTORS
- ❖ PRODUCT LIFE CYCLE

COMPETITION AND SUPPLY

- ❖ MAJOR COMPETITORS
- ❖ CHARACTERISTICS OF COMPETITORS
- ❖ CAPACITY UTILISATION
- ❖ ADDITIONAL CAPACITY
- ❖ EXPORTS
- ❖ IMPORTS

WHAT IS A MARKETING STRATEGY?

AN ACTION PLAN TO ACHIEVE DESIRED MARKET GOALS
Market share, penetration

STRATEGY PREDICATED ON UNDERSTANDING:

- DEMAND-SUPPLY GAP, IF ANY
- CONSUMER NEEDS
- COMPETITORS' STRATEGIES
- EXTERNAL ENVIRONMENT

THEN THE MARKETING STRATEGY CAN BE

- FORMULATED and
- IMPLEMENTATION PLAN DEVISED

ELEMENTS OF MARKETING STRATEGY

- ❖ PRODUCT
- ❖ PRICE
- ❖ PROMOTION AND ADVERTISING
- ❖ DISTRIBUTION
- ❖ SERVICES

PRODUCT

- ❖ CLASSIFICATION
- ❖ FEATURES
- ❖ PRODUCT MIX
- ❖ BRAND POLICY
- ❖ PACKAGING

APPROACHES TO PRICING DECISIONS

- ❖ COST – BASED
- ❖ BUYER – BASED
- ❖ COMPETITOR – BASED
- ❖ CHANNEL PRICE BUILD UP
- ❖ STATUTORY OR REGULATORY

PROMOTION

- ❖ TRADE SHOWS AND EXPOSITIONS
- ❖ MEDIA ADVERTISING
- ❖ FREE or NO-RISK TRIALS
- ❖ LOBBYING
- ❖ WARRANTY SERVICES
- ❖ TECHNICAL SERVICES
- ❖ PUBLIC RELATIONS

DISTRIBUTION

- ❖ NATURE OF PRODUCT
- ❖ CONSUMER
- ❖ COST
- ❖ SERVICING CHANNEL MEMBERS
- ❖ PRACTICES OF COMPETITORS

AFTER SALES AND WARRANTY SERVICES

- ❖ TECHNICAL SERVICE
- ❖ WARRANTIES
- ❖ SPARE PARTS

EXTENT OF TECHNICAL ANALYSIS

- ❖ SUFFICIENTLY EXTENSIVE TO PROVIDE RELIABLE INFORMATION CONCERNING PROJECT FEASIBILITY
- ❖ SUFFICIENTLY DETAILED TO OBTAIN DESIRABLE ACCURACY IN PROJECT COST ESTIMATES

SCOPE OF TECHNICAL ANALYSIS

- ❖ PRODUCT DESIGN
- ❖ TECHNOLOGY
- ❖ ENVIRONMENT
- ❖ MATERIALS AND OTHER INPUTS
- ❖ ORGANIZATION
- ❖ HUMAN RESOURCES
- ❖ FACILITIES REQUIREMENTS
- ❖ INFRASTRUCTURE
- ❖ LOCATION
- ❖ PROJECT IMPLEMENTATION
- ❖ COSTS

CONSEQUENCES OF INADEQUATE TECHNICAL ANALYSIS

- 1 APPROVAL OF ILL-GROUNDED PROJECT:
 - LOSS OF INVESTED RESOURCES
- 2 APPROVING A VIABLE PROJECT WITHOUT COMPLETE AND COMPETENT TECHNICAL ANALYSIS:
 - DELAYS IN PROJECT IMPLEMENTATION
 - PROFITABILITY LOWER THAN EXPECTED
- 3 REJECTING A VIABLE PROJECT DUE TO INADEQUATE TECHNICAL ANALYSIS:
 - LOSS OF ANTICIPATED PROFITS AND DEVELOPMENT OPPORTUNITIES

TECHNICAL ANALYSIS AND DESIGN DURING PLANNING PHASE

- ❖ PRODUCT ANALYSIS
- ❖ PROCESS DESIGN
- ❖ PLANT DESIGN
- ❖ ORGANIZATION STRUCTURE
- ❖ IMPLEMENTATION AND DECOMMISSIONING PLANS
- ❖ PROJECT COST ESTIMATES

TECHNICAL ANALYSIS, DESIGN AND SUPERVISION DURING INVESTMENT PHASE

- ❖ DETAILED ENGINEERING DESIGNS
- ❖ PROCUREMENT OF MATERIALS AND EQUIPMENT FOR CONSTRUCTION & PLANT
- ❖ CONSTRUCTION AND INSTALLATION SUPERVISION
- ❖ MAINTENANCE AND QUALITY CONTROL PLANS
- ❖ RECRUITMENT AND TRAINING MANAGEMENT AND OPERATING PERSONNEL
- ❖ SUPERVISION OF PLANT COMMISSIONING

TECHNICAL ACTIVITIES DURING PRODUCTION PHASE

- ❖ TRAINING MANUFACTURING PERSONNEL
- ❖ PRODUCTION SUPERVISION
- ❖ PROCESS REFINEMENT
- ❖ IMPLEMENTATION OF MAINTENANCE PROGRAMME
- ❖ QUALITY CONTROL IMPLEMENTATION

TECHNICAL ACTIVITIES DURING DECOMMISSIONING PHASE

- ❖ SUPERVISION OF PROJECT DISMANTLING
- ❖ ARRANGING FOR DISPOSAL OF MATERIALS
- ❖ SITE CLEANUP

LOCATION

IN WHAT COUNTRY, REGION, TOWN or VILLAGE SHOULD THE PLANT BE LOCATED?

SITE

WHERE IN THE TOWN, VILLAGE OR REGION SHOULD THE PLANT BE CONSTRUCTED?

PROJECT LOCATION PREFERENCES

- ❖ RAW MATERIALS-ORIENTED
 - MINING PROJECT
 - HYDRO-POWER
 - AGRO-INDUSTRY
- ❖ MARKET-ORIENTED
 - SERVICES
 - HIGH QUALITY GARMENTS
 - WATER-BASED BEVERAGES
- ❖ FLEXIBLE LOCATION
 - MACHINE TOOLS
 - ELECTRONICS
 - PHARMACEUTICALS

SITE SELECTION CONSIDERATIONS

PRELIMINARY FACILITIES LAYOUT:

- ❖ SIZE AND SHAPE OF AREA
- ❖ ALLOCATION FOR BUILDINGS AND MAIN EQUIPMENT
- ❖ PLAN FOR ROADS, RAILS, CONVEYORS, UTILITIES
- ❖ STORAGE AREAS FOR MATERIALS AND PRODUCTS
- ❖ OFFICE AND SERVICE BUILDINGS AND AREAS
- ❖ ENVIRONMENTALLY SENSITIVE AREAS
- ❖ FUTURE EXPANSION

BASIS FOR ESTIMATING:

- ❖ COST OF LAND
- ❖ BUILDINGS AND CIVIL WORKS
- ❖ OUTDOOR WORKS
- ❖ OPERATING COSTS FOR IN-PLANT TRANSPORT AND COMMUNICATIONS

MULTI-CRITERIA OPTIMISATION

No.	CRITERION	WEIGHT	POINTS FOR LOCATION			
			1	2	3	m
1	PRODUCTION FACTORS					
2	SITES AVAILABLE					
3	INFRASTRUCTURE					
4	MARKETS					
n	etc.					
TOTAL LOCATION POINTS (TP)						

- ❖ A NUMERICAL WEIGHT SCALE IS SELECTED AND ASSIGNED TO EACH CRITERION
- ❖ A LOCATION POINT SCALE IS SELECTED; EACH LOCATION IS SCORED FOR THE CRITERION
- ❖ HIGHEST POINT TOTAL INDICATES MOST FAVORABLE LOCATION

$$TP_k = \sum_{j=1}^n W_j P_{jk} \text{ for } k = 1, 2, \dots, m$$

W_j weight for criterion j

P_{jk} points for criterion j , location k

ENVIRONMENTAL ISSUES

- ❖ ENVIRONMENTAL AND SOCIO-ECONOMIC CONDITIONS AT THE PROPOSED PLANT SITE?
- ❖ EFFECTS OF PROJECT ON THESE CONDITIONS?
- ❖ ECOLOGICAL IMPACTS ACCEPTABLE UNDER EXISTING ENVIRONMENTAL REGULATIONS?
- ❖ EXTRA - REGULATORY IMPACTS ACCEPTABLE SHORT AND LONG TERM?

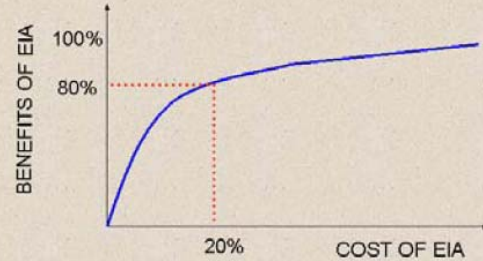
EXTENT OF ENVIRONMENTAL IMPACTS

- ❖ LOCAL
 - AT PRODUCTION SITE
 - ADJACENT AREAS
- ❖ REGIONAL
 - DOWNSTREAM
 - LEEWIND DIRECTION
- ❖ GLOBAL
 - ATMOSPHERE
 - OCEANS

TERMINOLOGY OF ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

- ❖ ENVIRONMENT
- ❖ ECOLOGY
- ❖ ENVIRONMENTAL IMPACT
- ❖ ENVIRONMENTAL IMPACT ASSESSMENT (EIA)
- ❖ ENVIRONMENTAL IMPACT STATEMENT (EIS)
- ❖ PRELIMINARY ENVIRONMENTAL EXAMINATION (PEE)

COST EFFECTIVENESS OF EIA



HUMAN RESOURCES PLANNING

- ❖ PERSONNEL – LOCAL AND EXPATRIATE
 - REQUIREMENTS (PHASE AND CLASSIFICATION)
 - QUALIFICATIONS
 - AVAILABILITY
- ❖ JOB DESCRIPTIONS
- ❖ RECRUITMENT METHODS
- ❖ LABOUR/UNION RELATIONS
- ❖ RESOLUTION OF DISPUTES
- ❖ DISMISSAL PRACTICES
- ❖ PRODUCTIVITY STANDARDS
- ❖ LANGUAGE ABILITIES
- ❖ SOCIAL INFRASTRUCTURE
- ❖ WAGES AND SALARIES, BENEFITS PACKAGE

ESTIMATE OF HUMAN RESOURCES COSTS

- LIST:
- ❖ CLASSIFICATIONS
 - ❖ SALARIES and WAGES
 - ❖ BENEFITS and SURCHARGES
 - ❖ TRAINING
 - ❖ RECRUITMENT

APPLY TO DIRECT AND INDIRECT (OVERHEADS):

- ❖ PLANNING
- ❖ CONSTRUCTION
- ❖ OPERATIONS
 - ❖ ADMINISTRATION
 - ❖ PRODUCTION
 - ❖ MARKETING
 - ❖ SALES & DISTRIBUTION
- ❖ DECOMMISSIONING